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16. Abstract <p>Targets of Opportunity (TOP), were comprehensive community based programs addressing the drinking and driving concerns within a particular community. The program incorporated six elements: 1) General deterrence - public information, education and enforcement (short term), 2) Community focus, 3) Systems approach, 4) Financial self-sufficiency, 5) Citizen support, and 6) Prevention (long-term). Each TOP was given \$50,000 to provide evaluation of the project for a 2 year period. Countermeasure operations were supported by State, local and 402 funds.</p> <p>The ten sites selected as the Targets of Opportunity included: 1) Wichita, Kansas; 2) Spokane, Washington; 3) Coconino and Yavapai counties, Arizona, 4) Nassau County, New York; 5) Springfield and Waukegan, Illinois; 6) Miami-Dade County, Florida; 7) Salt Lake County, Utah; 8) Baton Rouge, Louisiana; 9) Lynn, Massachusetts; and 10) the State of Delaware.</p> <ul style="list-style-type: none"> o In many communities there was a decrease in trend or level of crashes, alcohol related crashes, fatal crashes and injuries: o There was increased development of prevention programs. o There was an increase in driving while intoxicated (DWI) arrests. o There was an increase in knowledge and understanding of alcohol and safe driving issues. o Task Forces were developed increasing the participation of citizens. 			
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EXECUTIVE SUMMARY

Targets of Opportunity (TOP), were comprehensive community based programs addressing the drinking and driving concerns within a particular community. The program incorporated six elements: 1) General deterrence - public information, education and enforcement (short term), 2) Community focus, 3) Systems approach, 4) Financial self-sufficiency, 5) Citizen support, and 6) Prevention (long-term). Each TOP was given \$50,000 to provide evaluation of the project for a 2 year period. Countermeasure operations were supported by State, local and 402 funds.

The importance of the program was in its conception as underscoring the Administration's commitment to help communities help themselves address problems of local concern. Since traffic safety has been viewed as ultimately a local problem, TOP's innovative approach seemed in itself an important step.

The ten sites selected as the Targets of Opportunity included: 1) Wichita, Kansas; 2) Spokane, Washington; 3) Coconino and Yavapai counties, Arizona; 4) Nassau County, New York; 5) Springfield and Waukegan, Illinois; 6) Miami-Dade County, Florida; 7) Salt Lake County, Utah; 8) Baton Rouge, Louisiana; 9) Lynn, Massachusetts; and 10) the State of Delaware.

Since the sites varied in size, characteristics, and activities related to the specific local drinking and driving problem, it is inappropriate to compare one site with another. However, there are interesting general findings resulting from the TOP program.

- o In many communities there was a decrease in trend or level of crashes, alcohol related crashes, fatal crashes and injuries:
 - In 50% of the sites, there were statistically significant differences before and after implementation of the TOP program.
 - In another 20% of the TOPs, decreases were found, but the results were not statistically significant.
- o There was increased development of prevention programs.
- o There was an increase in driving while intoxicated (DWI) arrests.
- o Adjudication procedures were streamlined.

- o Task Forces were developed increasing the participation of citizens.
- o There was an increase in knowledge and understanding of alcohol and safe driving issues.

Ten communities, one from each of NHTSA's Regions, were selected to participate in the program. The sites varied in population size and demographics, however, the very diversity emphasized an important concept: there are many ways to be successful. All ten Targets of Opportunity were successful.

TARGETS OF OPPORTUNITY: BACKGROUND

The Target of Opportunity (TOP) concept was developed to promote the comprehensive community based general deterrence alcohol program at the local level. The sites varied in size and characteristics. Most were cities and/or counties while one site was the entire State. Some were predominately urban/suburban communities while others were predominately rural communities. Because of the wide divergence in the nature, characteristics and the degree to which the TOP concepts were applied, it is inappropriate to compare one site with another. However, one can make some general observations concerning the problems encountered in establishing the targets and the effectiveness of the operations as it pertains to the implementation of the six basic elements: general deterrence, community focus, systems approach, financial self-sufficiency, citizen support and prevention.

NHTSA's OBJECTIVES

In the fall of 1981, the National Highway Safety Traffic Administration (NHTSA) developed a comprehensive alcohol program which was based on the experience gained from previous Alcohol Safety Action Projects (ASAP's) but with emphasis on grass roots, citizen participation and long term education/prevention concepts. Using this approach, NHTSA's objectives were to:

1. catalyze the States and communities into organized and systematic action;
2. provide States and communities with technical assistance;
3. educate citizens about the magnitude of the problem and possible solutions;
4. develop programs which have maximum potential impact in deterring social drinkers as well as problem drinkers, and;
5. demonstrate the systems approach can and will work, articulate its benefits and encourage communities to act.

To accomplish the objectives, the focus was placed on comprehensive community based alcohol programs. This results from the consideration that traffic safety might be primarily a local problem that could best be solved at that level.

This was not to say that the Federal and State government had no role to play. State government had a direct as well as an indirect role. Establishment of drunk driving laws is normally a State responsibility. State police, appellate courts, and licensing agencies have a direct role in the arrest and sanctioning of offenders.

State government was also involved in the collection and distribution of financial resources to local and State agencies as well as providing planning, record keeping, policy formulation and guidance in the form of services to local communities. The Federal government's role was to support and facilitate action in the States and communities. A carefully chosen program of countermeasure research and evaluation had produced valuable information on program effectiveness. Using this as a base, NHTSA provided aid, training, technical assistance, evaluation and documentation to the States and communities.

NHTSA'S ROLE IN PROGRAM

More specifically, the Agency role in this program was to:

1. Provide technical assistance to improve alcohol enforcement, prosecution, adjudication, public information and education efforts.
2. Provide administrative and program evaluation assistance.
3. Develop and conduct training for practitioners, police, prosecutors, judges, etc.
4. Develop and improve drunk driving countermeasures through the highway safety grant program.
5. Expand private sector involvement.
6. Develop citizen support.
7. Maintain a clearinghouse to apprise other States of successful programs and techniques employed by the "Targets of Opportunity" cities, States and counties to serve as models for the deterrence of drunk driving.

The comprehensive community based general deterrence approach consisted of the following six components:

1. General Deterrence Approach (short-term) - conducting programs oriented toward deterring the majority of drunk drivers who are never arrested (rather than "treating" the few who are) for short-term impact.

2. Community Focus - placing program emphasis and responsibility at the local level.
3. Systems Approach - integrating and coordinating enforcement, prosecution, adjudication, education/treatment, public information/education, and licensing functions at the local and State level as appropriate.
4. Financial Self-Sufficiency - assessing and collecting fines, court costs, treatment tuition fees, etc., from convicted offenders to defray the costs of local/community programs.
5. Citizen Support - generating community/citizen support for comprehensive community programs to provide a political base for increased countermeasure activity.
6. Prevention (long-term) - implementing efforts to change societal attitudes about drinking and driving through long-term prevention/education programs.

1982 NHTSA CONSENSUS: HEADQUARTERS AND REGIONAL OFFICES

During January 13-15, 1982, representatives from NHTSA Regional Offices joined Headquarters members of the Alcohol Safety Task Force and various support personnel to refine the Agency's new Alcohol Safety Program and to identify respective roles in its implementation. Results of the meeting were as follows:

1. Agreed on a new alcohol countermeasures approach (comprehensive community based alcohol programs) which shifts from a specific deterrence (concentrating sanctions and rehabilitation efforts on apprehended drunk drivers) to a general deterrence concept, which seeks primarily to deter potential drunk drivers who may never actually enter the countermeasure system.
2. Identified goals for implementing essential State and local general deterrence systems, including stronger license sanctions, self-financing mechanisms for local programs, etc.
3. Described a pro-active role for Federal/regional personnel: (a) working to establish State and local Task Forces to upgrade system improvements, and (b) providing direct guidance and support to "activist" organizations, corporations, etc., clamoring for better control of drunk drivers.

4. Developed plans for selecting ten volunteer "Targets of Opportunity" in order to concentrate technical assistance.
5. Discussed means for coordination with critical professional alcohol related organizations and with people working on occupant restraints.

The program was to concentrate NHTSA technical resources (in-house staff, 402 funded evaluation contract effort) on ten volunteer target communities that were receptive to implementing the comprehensive community based program described.

Participating States and/or communities would be required to commit substantial State and local resources to assist in program implementation. NHTSA staff and contract resources would then promote and assist the selected jurisdiction in improving countermeasure operations (police, courts, licensing, public communications, evaluation etc.), improving legislation, developing citizen support, expanding private sector involvement, and implementing a locally coordinated drunk driver deterrence system.

THE TARGETS - CRITERIA FOR SELECTION

Rather than attempting to scatter the Agency's limited resources by actively promoting the model program in all 50 States, the approach sought to target and bring to bear sufficient technical resources to one community in each of NHTSA's ten Regions where success would sell itself to the remaining communities within and outside of the States. The communities were selected according to the following criteria:

1. Willingness to implement a comprehensive drinking driver control system.
2. Evidence of community support among enforcement agencies, courts, licensing and treatment agencies, private interest groups, etc.
3. An assessment of current status and progress made during the past five years in alcohol related activities and an outline of planned actions for the next five years.
4. Evidence of potential for success including; an effective organization plan and framework, State/local coordination, planning and potential for self-sufficiency, willingness to provide financial support, utilization of the general deterrence approach, and the existence of laws, regulations, and procedures supporting the control of drinking drivers.

5. Analysis of the legislative, economic, and political climate for supporting changes in deficient laws, regulations, and program practices.
6. Provision for program evaluation, including adequate and available traffic records, analysis and data reporting procedures, and ability to measure impact.

In February 1982, each NHTSA Regional office was asked to nominate "Target of Opportunity" based upon the criteria outlined above. Reviews of the criteria and supporting documentation resulted in the selection of one "Targets of Opportunity" from each of the NHTSA regions.

On June 30, 1982, the U.S. Department of Transportation announced the selections as part of a major program to promote the adoption of comprehensive, community based, general deterrence alcohol programs. Each target agreed to implement the comprehensive approach and to evaluate its feasibility and effectiveness after a two year operational period. The Target communities and their actual implementation dates are given below:

Spokane, Washington	January 1982
Delaware	January 1983
Illinois	January 1983
Nassau County, New York	January 1983
Wichita, Kansas	January 1983
Salt Lake County	April 1983
Coconino and Yavapai Counties, Arizona	September 1983
Baton Rouge, Louisiana	October 1983
Dade County, Florida	October 1983
Lynn, Massachusetts	January 1984

THE EVALUATION EFFORT

CASE STUDY APPROACH

The case study approach is one of several methods available to assess the progress of public policy related field programs.

The approach monitors, records, and analyzes the activities within an individual setting as changes are made. A challenge to evaluators of public policy programs is the difficulty of scientifically determining a specific cause and effect relation when several interacting changes are made. However, case studies concerned with the total picture evolving within a community are a respected method for tracking and recording changes. The varied interacting program elements present to different degrees in each community make the Targets of Opportunity perfectly adaptable to the case study method. (see Appendix A).

TECHNIQUES OF EVALUATION

Within the area of highway safety, two techniques or types of evaluation are most frequently used: Impact and Administrative. "Impact" refers most frequently to the ultimate measure of effectiveness: decrease in traffic crashes, fatalities, or the severity of injury. Intermediate Impact measures include attitudes, knowledge or behavior which, in the long run may result in a decrease in crashes, fatalities, or injuries. Some examples are: surveys measuring knowledge, attitudes, or self reported behavior, and observation surveys recording behavior in specific circumstances.

Administrative Evaluation, on the other hand, describes the performance measures or inputs into the traffic safety system, usually comparing planned goals versus actual attainments. Examples include: number of DWI arrests, hours devoted to DWI patrol, adjudication procedures, number of citizen groups organized; number of public information and education materials developed and distributed.

Within the different Targets, different techniques were used by each of the evaluators. It should be emphasized that the size of the community, variable quality of data, and expertise of the evaluator appear to have been important factors in selecting techniques. The evaluator for Wichita, for example included several impact measures, while the evaluator for Coconino and Yavapai Counties used a more limited range. (see Appendix A).

RESULTS AND DISCUSSION

The results of the Targets of Opportunity case studies are revealed in Table 1, "Impact Evaluation: Crash Data"; Table 2, "Intermediate Impact Measures: Attitude Surveys"; and Table 3, "Presence of Administrative Evaluation Data: Selected Activities by Site". In addition, Figures 1-15 illustrate the relation between crash data and DWI arrests in selected TOPs.

IMPACT EVALUATION: CRASH DATA

Table 1 reveals statistically significant differences in alcohol related crashes for 50% of the TOP sites. In another 20% of the TOPs, decreases in crashes were found but the results were not statistically significant. Wichita, Kansas showed a decrease of 60% in the surrogate measure for alcohol related driving (single vehicle nighttime fatalities). During the same time period, the rest of the State of Kansas showed 10% reduction in such crashes, which was not statistically significant.

Spokane, Washington revealed similar significant differences in crash data before and after the implementation of TOP for drivers who had been drinking. However, unlike Wichita, there were no significant differences between Spokane County and the rest of the State of Washington with regard to alcohol related crashes. Apparently the trend for decreasing alcohol crashes existed throughout the State, and may be seen as a positive reflection on the State's concern for this safety issue. It is important to note, however, that significant differences were found before and after the Target program in Spokane County. These results indicate the effect of TOP, although a portion of the decreased crash rate might reflect the generally declining crash trend for the State.

Table 1 further reveals significant differences in alcohol related crashes in the Springfield and Waukegan, Illinois Target sites. During the 1983 program nighttime crashes decreased markedly.

In Nassau County, significant differences were reported for nighttime personal injury crashes. There were no significant differences in daytime personal injury crashes. This may be expected if nighttime crashes are the surrogate for alcohol related accidents and the TOP focused on decreasing drinking and driving crashes.

Finally, Table 1 discloses that the State of Delaware had significant differences in alcohol related fatalities, fatal crashes, personal injuries, and alcohol related accidents.

**TABLE 1
IMPACT EVALUATION
ACCIDENT DATA**

TARGET SITE	TYPE OF ANALYSIS
1) Wichita, Kansas	Time series Multiple regression
Description: <ul style="list-style-type: none"> o Surrogate measures for Alcohol-involvement <ul style="list-style-type: none"> - Nighttime single vehicle fatalities and injuries o Day/night single vehicle fatalities and injuries o Multiple vehicle fatalities and injuries 	
Key Findings: <ul style="list-style-type: none"> o Wichita vs. rest of State. <ul style="list-style-type: none"> o 60% reduction in single vehicle nighttime fatalities. A large and statistically significant reduction for Wichita. o In contrast, in the State, the single vehicle nighttime fatality (alcohol surrogate) accidents decreased only 10%, (not statistically significant). 	Statistically significant differences
2) Spokane, Washington	Time Series (Box Jenkins) Percentages
Description: <ul style="list-style-type: none"> o Alcohol accidents, injuries, fatalities (1980-1984). o Accident totals: Day-vs-Nighttime <ul style="list-style-type: none"> - Surrogate alcohol measure (single vehicle-nighttime fatal). - Alcohol related injuries and fatalities. 	

**TABLE 1
IMPACT EVALUATION
ACCIDENT DATA**

TARGET SITE		TYPE OF ANALYSIS
	<p><u>Key Findings:</u> o The decrease in accidents within Spokane County paralleled that of the State. The number of alcohol related accidents had been diminishing in recent years (1982-1985) within the State, similar findings seemed to be true for Spokane County.</p> <p>o Portion of drivers (Spokane County) involved in investigated collisions who had been drinking showed significant difference pre and post intervention: 6.3% decrease (significant at .01). However, given State wide trends, may be inappropriate to give all credit to TOP for success.</p>	<p>No statistically significant difference (between Spokane and State)</p> <p>Significant difference (.01) pre & post TOP</p>
3) Salt Lake County, Utah	<p><u>Description:</u> o Traffic fatalities and nighttime fatal crashes.</p> <p><u>Key Findings:</u> o No significant differences as a result of intervention.</p> <p>o It is important to note that nighttime single crashes were at, or near zero. As a result, insufficient information to answer questions. County may be at limit: very aware of drinking-driving problems, had low numbers of fatal crashes.</p>	<p>Time Series (Box Jenkins)</p> <p>No significant differences</p>

TABLE 1
IMPACT EVALUATION
ACCIDENT DATA

TARGET SITE		TYPE OF ANALYSIS
4) Springfield & Naukegan, Illinois	<p><u>Description:</u> o Accident data 1980-81, 1982-83, 1983-1984.</p> <p><u>Key Findings:</u> o Alcohol related accidents decreased significantly between the hours of 9:00pm to 6:00am during the 1983 program.</p>	<p>Multivariate Time series (Box Jenkins) Chi Square</p>
5) Nassau County, New York	<p><u>Description:</u> o Daytime and nighttime personal injury crashes.</p> <p><u>Key Findings:</u> o Significant differences found: Decrease in nighttime personal injury crashes (surrogate for alcohol related crashes). o No significant differences in daytime personal injury accidents.</p>	<p>t-test</p>
6) Miami-Dade County, Florida	<p><u>Description:</u> o Traffic accidents o Fatalities (alcohol-related)</p> <p><u>Key Findings:</u> o Decreased, but not statistically significant, and not solely attributable to the TOP project.</p>	<p>Frequencies Percentages No statistical tests of significance.</p>

**TABLE 1
IMPACT EVALUATION
ACCIDENT DATA**

TARGET SITE	TYPE OF ANALYSIS
7) Coconino County & Yavapai County, Arizona	<p>Time Series (Box Jenkins)</p> <p>Percentages</p> <p>Frequencies</p> <p>No significant differences</p>
<p><u>Description:</u> o Accidents</p> <p>o No pre-program data</p> <p>o More narrative than quantitative</p> <p>o Wide variation in kind of data gathered</p> <p><u>Key Findings:</u> o In Coconino County: Relation between total accidents and those involving alcohol declined during the 2 year period.</p> <p>o In Yavapai County: Decrease in alcohol involved accidents during second year, while overall, accidents slightly increased.</p>	
8) Baton Rouge, Louisiana	
<p><u>Description:</u> o Information not collected for TOP site.</p> <p><u>Key Findings:</u></p>	
9) State of Delaware	<p>Analysis of variance</p> <p>Time series</p> <p>Moving averages</p>
<p><u>Description:</u> o Monthly data: (January 1980 - April 1984).</p> <p>o Alcohol related fatalities</p> <p>o Fatal accidents</p> <p>o Personal injuries</p> <p>o Alcohol related accidents</p>	

TABLE 1
IMPACT EVALUATION
ACCIDENT DATA

TARGET SITE		TYPE OF ANALYSIS
	<p><u>Key Findings:</u></p> <ul style="list-style-type: none"> o Alcohol related fatalities, significant difference-intervention in implementation of new law in October 1982. o Fatal accident - significant decrease from 6.27 prior to Oct 1982, to 4.68 after October. o Personal injuries, although no significant difference in trend; significant difference in number of injuries after 1982 (from average of 144.9 to 132.4). o Alcohol related accidents-significant decrease in average number of accidents after October 1982, an average of 12 a month. <p><u>NOTE:</u> Time Series appears to show data highly effected by seasonality</p>	Significant differences
10) Lynn, Massachusetts	<p><u>Description:</u> Not applicable: did not gather accident data.</p> <p><u>Key Findings:</u></p>	

Other Target sites showed a decrease in crashes, however, the results were not found to be statistically significant. Salt Lake County, Utah was concerned with traffic fatalities and nighttime fatal crashes. The crashes were at or near zero before, as well as after TOP.

In Miami-Dade County, Florida, although traffic crashes and alcohol related fatalities decreased, the results were not statistically significant, nor could they be entirely related to the TOP project.

Table 1, further reveals that mixed results were found in Coconino and Yavapai Counties, Arizona. In Coconino County there were decreases (not statistically significant) in the number of alcohol related crashes during the TOP project year. However, in Yavapai County, the overall number of crashes increased slightly, while alcohol related accidents decreased (although there was no statistically significant difference). Similarly, in Baton Rouge, Louisiana, although fatalities decreased from 19 to 16 drivers, personal injuries increased by 505 (from 3,124 to 3,629) while crashes increased by 264; from 6,899 to 7,163.

ATTITUDE SURVEYS: INTERMEDIATE IMPACT MEASURES

Table 2 reveals that 80% of the TOP sites performed attitude surveys to determine the effectiveness of the program. There were 10 surveys performed in 8 sites. In some cases (Wichita, Spokane) more than one type of survey was performed in a site. The specific samples varied however, in general, respondents were licensed drivers over 18 years of age.

The surveys included more than one approach: Perception of risk; knowledge or awareness of drinking and driving issues - including legislation; effectiveness of PI&E efforts; and effects of prevention programs. Only 40% of the sites performed tests of statistical significance on the survey results (Wichita, Spokane, Nassau County, Lynn). In the Delaware TOP, factor analysis was used to determine the core attributes of respondents.

The remaining three sites which performed attitude surveys relied upon percentages (proportions) to indicate changes in the TOP community over time: Salt Lake County; Coconino and Yavapai Counties; and Miami-Dade County.

Selected results:

In Wichita, significant differences were found with regard to perception of risk. Individuals who could be classified as "frequent DWI's" (frequently drive after drinking) were aware of the risks involved and agreed with respondents who did not drink and drive, that people should not drive when drunk. Wichita's TOP developed an alcohol and drug prevention program for public schools. Pre- and post TOP attitude surveys of the prevention component revealed significant decreases in

TABLE 2
INTERMEDIATE IMPACT MEASURES:
ATTITUDE SURVEYS

TARGET SITE	DESCRIPTION	N	PRE-TEST	POST-TEST	TYPE OF ANALYSIS
1) Wichita, Kansas	<p><u>Description:</u></p> <p>3) "Perception of Risk" Telephone survey.</p> <ul style="list-style-type: none"> - Drinking and perception of risk - Frequent and infrequent DWI <p><u>Key Findings:</u></p> <ul style="list-style-type: none"> o Respondents who classified themselves as frequent DWIs agreed with majority respondents that DWIs should not drink and drive. o "The focus of general deterrence on changing attitudes may be misplaced. Even those who admit to frequent drunk driving are aware of the risks and think they should not drive when drunk." 	7	x	x	Chi-Square F-test
	<p><u>Description:</u></p> <p>2) "Prevention in Public Schools" Pre and post surveys with intervention of "TEAM Training" in the alcohol and drug area. Surveys included:</p> <ul style="list-style-type: none"> - Self-reported use by students - Attitudes and knowledge. <p><u>Key Findings:</u></p> <ul style="list-style-type: none"> o Program resulted in significant decrease of drug and alcohol use o Significant changes in student attitudes were found. 	7	x	x	t-test
					Significant differences

TABLE 2
INTERMEDIATE IMPACT MEASURES:
ATTITUDE SURVEYS

TARGET SITE			N	PRE-TEST	POST TEST	TYPE OF ANALYSIS
2) Spokane, Washington	<u>Description:</u>	1) Assess "PI&E Effects" Telephone survey.	202	1981	1983	Chi Square for cross tabs
	<u>Key Findings:</u>	<ul style="list-style-type: none"> o Response to inquiry: <ul style="list-style-type: none"> - Drinking problem in Spokane County? 1983 = 89% agree 1981 = 72% agree - Drive after drinking? 1983 = 32% 1981 = 51% - Do not drink at all? 1983 = 34% 1981 = 26% o Increase in "Healthy attitudes" toward drinking and driving. o Decrease in number of respondents indicating they drive after drinking. o Increase in number of respondents indicating drinking problem exists in Spokane County. o Increase in number of respondents indicating they do not drink at all. 				Percentages
	<u>Description:</u>	2) 402 State funded survey to determine effectiveness of program in areas which received 402 funding support for projects in progress. Spokane County was one of the sites.	?	-	-	-
	<u>Key Finding:</u>	o No significant differences between Spokane and the rest of the State Counties.				

TABLE 2
INTERMEDIATE IMPACT MEASURES:
ATTITUDE SURVEYS

TARGET SITE			N	PRE-TEST	POST TEST	TYPE OF ANALYSIS
3) Salt Lake Cnty Utah	<u>Description:</u>	Surveys concerning drinking and driving	7	1983	1985	Percentages No tests for significant differences
	<u>Key Findings:</u>	<ul style="list-style-type: none"> o 1985 = 90% agreed alcohol impaired driving is a serious problem (similar to 1983). o 1985 = 38% believed alcoholic problem drinkers are most common alcohol impaired drivers. (Compared with 16.8% in 1983). o 1985 = 81% believed there are things one can do to prevent oneself from drinking too much and driving. (Compared with 92% in 1983). o 1985 = 81% believe it is acceptable among friends to suggest one has had too much to drink and drive. (1983 had "similar findings"). o 1985 = 58% reported driving within one hour of drinking at least once a month. (Compared with 46% in 1983). o No information provided concerning significant differences of responses. 				

TABLE 2
INTERMEDIATE IMPACT MEASURES:
ATTITUDE SURVEYS

TARGET SITE		N	PRE-TEST	POST TEST	TYPE OF ANALYSIS
4) Springfield & Montegut, Illinois	<p><u>Description:</u></p> <p>No attitude data collected for TOP site.</p> <p><u>Key Finding:</u></p> <p>State wide attitude survey performed: Data not presently available.</p>				
5) Nassau Cnty. New York	<p><u>Description:</u></p> <p>Perception of risk of arrest, conviction and punishment. Telephone and mail survey. (Apparently, combined data from two different methods.) Individuals who received survey in mail were asked to telephone evaluators collect and provide responses. The mail/call in group would appear to differ from the individuals called as a result of random selection.</p> <p>No baseline data. 1983 data from individuals asked to respond "retroactively".</p> <p><u>Key Findings:</u></p> <ul style="list-style-type: none">o 99% of Nassau County residents saw drinking as "serious", 82% saw problem as "very serious".o 77% began to think of drinking and driving as more serious "over the last 2 years". Sources of information included: 52% publicity from accidents; 16% publicity regarding new laws.o "High Risk" group had a significantly lower perception of arrest than the others in same age group.o 1983 vs. 1984: Average perception of arrest for drinkers and non-drinkers increased significantly. Greater chance of being stopped; greater chance of conviction. Increased knowledge of probable penalties for drinking and driving.	2157 (1983)	No 1984	Chi square Percentages	Significant differences

Significant differences

TABLE 2
INTERMEDIATE IMPACT MEASURES:
ATTITUDE SURVEYS

TARGET SITE			N	PRE-TEST	POST TEST	TYPE OF ANALYSIS
6) Miami-Dade Cnty, Florida	<u>Description:</u>	Survey to determine community's level of awareness of dangers of driving under the influence. Designed to measure effectiveness of PI&E effort (FY 84 and FY 85).	7	1983	1985	Percentages
	<u>Key Findings:</u>	<ul style="list-style-type: none"> o Dade County community more aware of effects of DUI in 1985 than in 1983. o In 1985, 63% (compared with 48% in 1983) "strongly agreed" that "among your friends, it is acceptable to suggest that others not DUI". o In 1985, 56% (compared with 43% in 1983) "Strongly agreed" that "among your friends, it is acceptable to stop others from DUI". o In 1985, only 7% (down from 18% in 1983) indicated they had not "done anything in the past year to keep friends, family members or others from DUI". o Respondents in 1985 compared with those in 1983 estimated a greater likelihood that DUI would result in an arrest or an accident. <ul style="list-style-type: none"> - 50% or better chance of being arrested if DUI <ul style="list-style-type: none"> --1985 = 43% agreed --1983 = 36% agreed - 50% or better chance of being in an accident if DUI <ul style="list-style-type: none"> --1985 = 80% agreed --1983 = 71% agreed 				

TABLE 2
INTERMEDIATE IMPACT MEASURES:
ATTITUDE SURVEYS

TARGET SITE	N	PRE- TEST	POST TEST	TYPE OF ANALYSIS
7) Coconino & Yavapai Cnties Arizona	7 342	No Yes	- No	Percentages Narrative
<u>Description:</u>	Prevention PI&E			
	- In Coconino Cnty - In Yavapai Cnty			
<u>Key Findings:</u>	o High awareness of alcohol driving problem prior to program imple- mentation.			
8) Baton Rouge, Louisiana				
<u>Description:</u>	No attitude data collected for TOP site.			
<u>Key Finding:</u>	Not applicable			

TABLE 2
INTERMEDIATE IMPACT MEASURES:
ATTITUDE SURVEYS

TARGET SITE			N	PRE-TEST	POST TEST	TYPE OF ANALYSIS
9) State of Delaware	<u>Description:</u>	Statewide survey to measure opinions knowledge, and attitudes of Delaware driving population concerning the new DUI legislation - and drinking and driving.	?	-	-	Percentages Factor analysis
	<u>Key Findings:</u>	<ul style="list-style-type: none">o Public awareness was high:<ul style="list-style-type: none">- 68% felt DUI was a "very serious" problem- 67% "strongly approved" of sobriety checkpoints- 76% believed that compared to last year, DUI more likely to be stopped by police- 80% believed that compared with last year, more likely to be convicted.o Factor analysis indicated 3 underlying response patterns:<ul style="list-style-type: none">- Severity of Sentencing for Drinking Drivers- Civil Liberties Orientation- Moral Judgments				

TABLE 2
INTERMEDIATE IMPACT MEASURES:
ATTITUDE SURVEYS

TARGET SITE			N	PRE- TEST	POST TEST	TYPE OF ANALYSIS
10) Lynn, Massachusetts	<u>Description:</u>	Telephone surveys: random selection. from Lynn. Baseline and two followups.	501	1984		Percentages
	<u>Key Findings:</u>	• Baseline indicated "strong need" for comprehensive community program:	421		1985	Chi square
		- 19% reported driving after drinking too much (in last year)	503		1986	t-tests
		- The perception of risk of being apprehended by police was less than one in 20 or 5%.				
		• Comparison of Baseline and followup surveys.				Statistically significant differences
		- "Frequency of driving after drinking one or more times in last year" decreased from 19% at Baseline to 13% (post test 2) ($p < .002$).				
		- "Reasons for decreases in the likelihood of driving after drinking":				
		-- "Stricter DWI penalties" ($p < .003$)				
		-- "Personal circumstances" ($p .002$)				
		- "Ways to avoid drinking and driving":				
		Two items showed statistically significant differences.				
		-- "Stay over night" ($p < .001$)				
		-- "Limit alcohol consumption" ($p < .004$)				

self reported drug and alcohol use. In addition, it was found that attitudes of students changed significantly, apparently as a result of the prevention program.

In Spokane County, pre- and post TOP surveys were performed to determine the effectiveness of PI&E efforts. Results reveal an increase in "healthy attitudes" toward drinking and driving including: 1) a drop in the number of respondents indicating they drove after drinking (from 51% in 1981 to 32% in 1983); 2) an increase in the numbers who do not drink at all (26% in 1981 to 34% in 1983); and 3) an increase in the number agreeing that there is a drinking problem in Spokane County (from 72% in 1981 to 89% in 1983).

Interested in 402 programs, the State of Washington performed an attitude survey comparing Spokane County and other counties which had 402 programs. No significant difference were found. This may indicate that 402 funded efforts were equally successful, regardless of the format in which the program appeared.

Table 2 reveals that in Nassau County, New York a statistically significant difference was found between the groups classified as "High Risk" and other respondents in the same age group. Specifically, high risk respondents had a significantly lower perception of arrest than other respondents.

In Lynn, Massachusetts, statistically significant differences were found between the Baseline and later surveys. The results included a decrease in driving after drinking. "Stricter DWI penalties" as well as "personal circumstances" were reasons given for the decrease. In addition, "staying over night" and "limiting alcohol consumption" were seen as the major ways to avoid drinking and driving. The TOP evaluation for the State of Delaware employed the statistical technique of factor analysis to determine underlying core attributes of survey respondents. Three independent (non-overlapping) "factors" were found. The first factor, "Severity of sentencing for drinking drivers", was related to respondents who felt that DUI was in some cases more serious than murder. These respondents were opposed to individuals Driving Under the Influence, and would be in favor of stringent sentences.

However this factor was to some extent negatively related to the second factor, "Civil Liberties Orientation". Survey respondents whose response patterns fell into this category were opposed to roadblocks; felt that the roadblocks might be a violation of constitutional rights, and also believed that the State DUI law was too strict. A third factor, unrelated to either of those previously mentioned, was labelled "Moral Judgments". Respondents revealed a pattern of disapproving DUI on moral grounds. The tendency was to see DUI offenders as normally weak rather than ill or suffering from effects of disease (alcoholism).

During the course of the TOP project, respondents to the Salt Lake County survey expressed an increase in the belief that alcoholic problem drivers were the most common alcohol impaired driver (38% in 1985, compared with 16.8% in 1983). However, compared with 46% in 1983, 58% in 1985 reported driving within one hour of drinking, at least once a month. One explanation might be that the response reflects the TOP's influence in encouraging respondents to be more aware of their alcohol and driving behavior. If such is the case, then the increased percentage may reflect greater attention being paid to one's own behavior, and not necessarily indicate that prior to TOP respondents were less likely to drink and drive.

Table 2 reveals results from the Miami-Dade County survey: in 1985 only 7% of respondents indicated they had not "done anything in the past year to keep friends, family members and others from DUI". Apparently in part as a result of the TOP activity, awareness of DUI effects increased. In addition there was growth concerning knowledge and involvement with drunk driving issues. In 1985 compared with 1983, more respondents indicated it was acceptable among friends to stop others from driving under the influence (56% vs. 43%) and to suggest that others not drive under the influence (63% vs. 48%).

ADMINISTRATIVE EVALUATION

Table 3 displays selected activities for which sites gathered administrative evaluation data. The activities displayed may be considered "core" areas. The myriad variety of individual events and activities of all TOPs have not been listed. The Table represents a selected sample, not an exhaustive catalog of data gathered by the sites. However, the topics are in the key areas of interest to NHTSA's TOP program: Task Forces, Coalitions, Enforcement, Adjudication, Prosecution, Public Information and Education, Treatment, and Prevention. Within each key area, several activities are listed, i.e., Enforcement: Arrests, Patrols, Training, Roadblocks, Down time. These activities are not exhaustive of the actions taken by different TOPs, rather they represent the activities which seemed to be most often planned by target sites. It should be noted that some TOPs may have performed activities but not gathered administrative evaluation data; this chart indicates those sites which gathered data.

As a result, it has been possible to develop a standardized format listing activities for which the targets collected data. Although the targets varied and cannot be compared with each other, general trends and findings based on this categorization of data can be discussed.

One of the most interesting revelations of Table 3 is the emphasis on enforcement: 100% of the TOPs gathered data on enforcement activities; 90% of the targets were concerned with arrest rates; 80% provided training to police officers (e.g., gaze nystagmus); 60% were concerned with down time (time involved in processing DWI/DUI arrests; 50% of the TOP sites increased patrols and 40% used sobriety checkpoints or roadblocks.

Data for Adjudication and Prosecution issues were gathered in 80% of Target sites. However, 60% of the sites were concerned with reporting conviction rates. This can be seen as closely related to the interest in Enforcement activities (arrest rates). Baton Rouge was specifically concerned with the feasibility of gathering and storing court action data for later referral and analysis. The project gathered data concerning court cases involving individuals arrested for DUI in the city of Baton Rouge and processed or tried by the city court.

Eighty percent of Targets gathered administrative evaluation data on Public Information and Education activities including radio, newspaper, and television. Public Information and Education was frequently discussed in relation to increasing awareness of enforcement activities as well as knowledge of DWI/DUI laws and effects of drunk driving. Fifty percent of other targets were concerned with Rehabilitation programs and 60% were concerned with Prevention programs within school systems. None of the sites specifically evaluated prevention program activities for adults.

Task Forces and Coalitions represent important activities within the TOP sites. Task Forces served to give direction and focus to a community program and may be seen as an attempt to create structure and institutional permanence for an alcohol safe driving program.

Although all of the 10 TOPs indicated involvement of some form of a Task Force, the type of group varied: 30% had involvement with Governor's Task Force on Drunk Driving (Wichita, Salt Lake County, and, Delaware) but only one of these sites (Wichita) apparently had a working Task Force at the community level. Three sites (30%) indicated participation of a Mayor's Task Force (Lynn, Wichita, and Baton Rouge).

While 70% of the sites indicated an involvement with a Task Force directed by some "other" cadre (neither Governor's nor Mayor's), the most interesting example may be Spokane. This TOP was determined to have a citizen's "grass roots" Task Force and indicated that no politician nor office holder was to be a member. It was to be composed of local citizens interested in alcohol and safe driving issues.

Coalitions represented interested members within the community who banded together to support efforts involving alcohol and safe driving issues. Ninety percent of the TOPs had coalitions of one sort or another. Civic groups (70%) represented the most frequent type of Coalition; National organizations (60%) were also involved; but private companies formed Coalitions in only 20% of the TOPs.

Finally, Table 3 reveals that the TOPs were involved in an average of 12.6 selected activities per site.

TABLE 3
 PRESENCE OF ADMINISTRATIVE EVALUATION DATA: SELECTED
 ACTIVITIES BY SITE

TARGET SITES	TASK FORCE		COALITIONS			ENFORCEMENT				PAGE SUBTOTAL ACTIVITIES/SITE
	Gov.	Mayor/Other	Priv. Co.	Civic Grp.	Natl. Org.	Arrests	Patrols Increased	Training	Road Block Sobriety checkpt	Downline
Wichita, Kansas	x	x	x	x	x	x	x	x		x
Spokane, Washington		x		x		x		x		x
Salt Lake City, Utah	x		x		x	x	x	x	x	
Springfield & Mountgarden, Illinois		x		x	x	x	x	x		x
Nassau City, New York		x			x	x	x	x	x	
Miami-Dade City, Florida		x		x		x		x		x
Coconino & Yavapai Counties, Arizona		x		x	x	x				
Baton Rouge, Louisiana		x		x		x				
State of Delaware	x			x	x	x		x	x	x
Lynn, Massachusetts		x					x	x	x	
TOTAL	3	3	2	7	6	9	5	8	4	6
PERCENT OF ALL TARGET SITES INVOLVED IN ACTIVITY	30%	30%	20%	70%	60%	90%	50%	80%	40%	60%
PERCENT OF TARGETS INVOLVED IN TOPIC AREA	100%	100%	90%			100%				---

TABLE 3
PRESENCE OF ADMINISTRATIVE EVALUATION DATA: SELECTED
ACTIVITIES BY SITE

TARGET SITES	ADJUDICATION/PROSECUTION				PUBLIC INFO. AND EDUCATION			TREATMENT		PREVENTION	PAGE SUBTOTAL ACTIVITIES/SITE	GRAND TOTAL (both pages) ACTV/SITE
	Court/ Judge	Conviction/ Rates	Days to Trial/ Disposition	Case Ld. Issues	TV Radio	News Events	Other page	Rehabilitation	DWI Safety Courses			
1) Wichita, Kansas	x	x	x	x	x	x	x	x		x	10	20
2) Spokane, Washington	x	x	x		x	x	x	x		x	8	13
3) Salt Lake City, Utah	x				x	x	x	x	x	x	8	15
4) Springfield & Maukegan, Illinois		x	x	x	x	x	x			x	7	14
5) Massau Cnty, New York		x	x	x	x	x	x	x			9	16
6) Miami-Dade Cnty Florida	x	x		x	x	x	x				8	13
7) Coconino & Yavapai Cnties, Arizona		x			x	x	x			x	7	11
8) Baton Rouge, Louisiana	x		x		x	x	x		x		7	9
9) State of Delaware								x		x	2	9
10) Lynn, Massachusetts											0	4
TOTAL	5	6	5	4	6	7	7	5	2	6	66	126
PERCENT OF ALL TARGET SITES INVOLVED IN ACTIVITY	50%	60%	50%	40%	60%	70%	70%	50%	20%	60%		12.6 average actv/site
PERCENT OF TARGETS INVOLVED IN TOPIC AREA	80%				80%			60%		60%		

CRASH DATA AND DWI ARRESTS

One of the most compelling findings of the TOP program is the relation between crashes and arrests. As previously indicated in the section entitled, "The Evaluation Effort", it is difficult to determine a specific cause and effect relation when several interacting changes are made. The case study approach is concerned with the evolving results of a multifaceted intervention. Although the measure used in this section is DWI arrests, it is important to realize that one can not be sure that the results are due to arrests only. For example, Public Information and Education, Citizen Support, a revised Adjudication procedure or any number of interacting programs within the TOP intervention may have influenced the crash data.

In reviewing Table 1, a statistically significant difference for Impact Evaluation (crashes) occurred in Wichita, Spokane, Springfield and Waukegan, and the State of Delaware. Table 3, Measures of Administrative Evaluation, indicates that all four sites were actively involved in Enforcement issues: Arrest rates being perhaps the most clear cut and direct measure.

The relation between crashes and DWI arrests will be explored in the four selected TOPs.

Wichita, Kansas

Figure 1 reveals the relation between changes in crash rates for Wichita and the rest of the State before and after the Wichita TOP. The crashes are divided by time of day. Nighttime crashes have been frequently used as the surrogate measure for alcohol involvement.

Numerous statistically significant differences were found: of particular interest is the decrease of 153% in Wichita nighttime multiple vehicle injuries compared with a decrease of 26% for the rest of the State. Furthermore, there is a decrease of 82% in Wichita's nighttime multiple vehicle fatalities compared with a decrease of 48% for the rest of the State, and a decrease of 60% in the Wichita nighttime single vehicle fatalities compared with 10% for the rest of the State. Reductions in the category of Daytime crashes were similarly statistically significant, although percentages were not so dramatic.

Wichita daytime multiple vehicle injuries decreased 68%, while nighttime injuries decreased 153%. However, the 68% decrease in Wichita's daytime multiple personal injuries is compared with a decrease of only 22% for similar injuries in the rest of the State.

Wichita "multivehicle daytime fatalities" decreased 49% compared with 82% for similar "nighttime" crashes. However, the 49% decrease in Wichita's

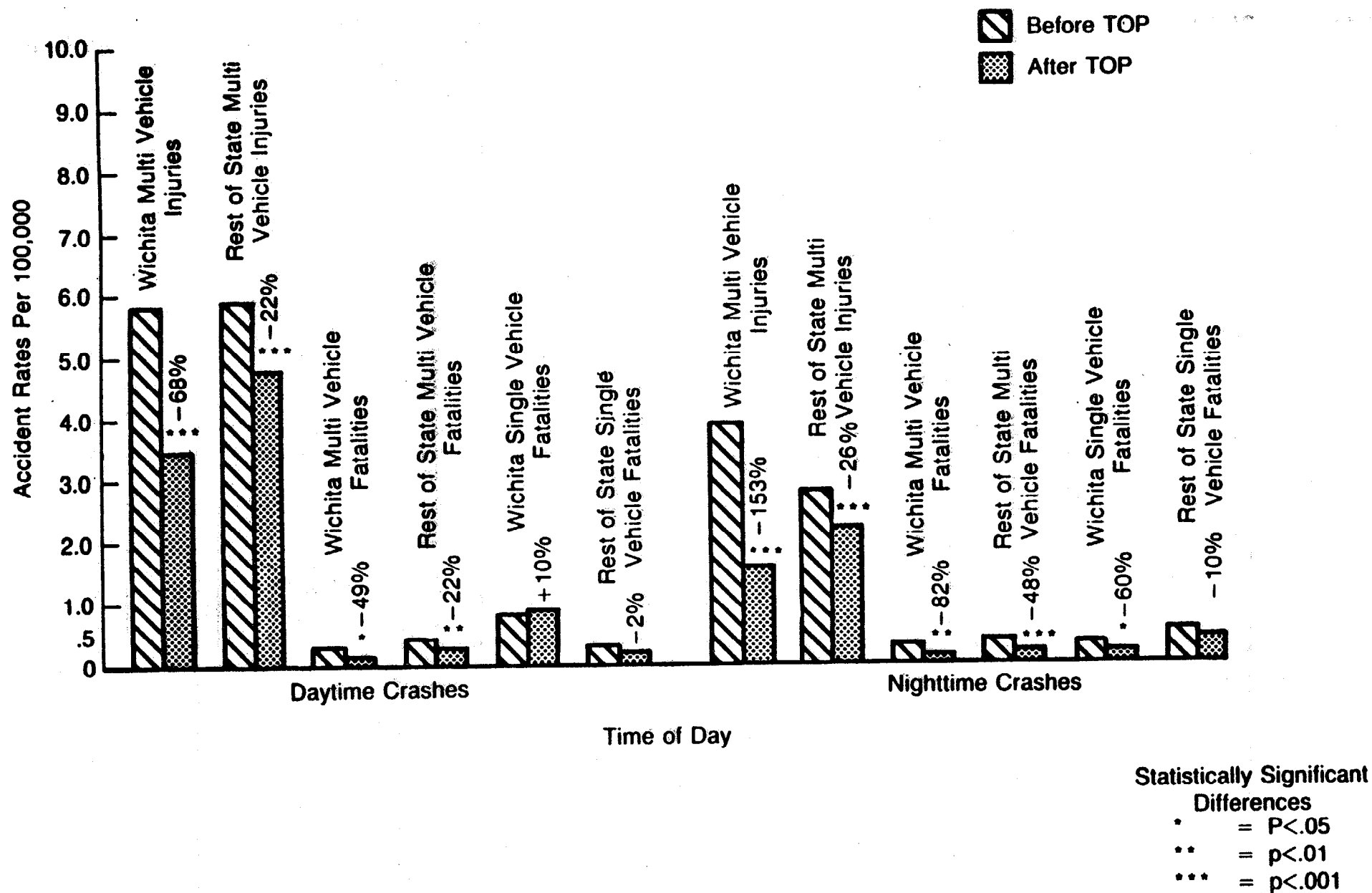


Figure 1. Change in Accident Rates Before and After TOP for Wichita and Rest of the State of Kansas. Daytime and Nighttime Crashes.

"multivehicle daytime fatalities" is compared to a 22% reduction for the rest of the State.

There appears to be clear support for the TOP's effectiveness in crash reduction for Wichita. Figure 2, a time series plot for all categories of accident in Wichita and the rest of the State before and after the TOP, further indicates the effectiveness of TOP. Prior to the intervention (TOP) Wichita crashes were similar to those for the rest of the State. However, following intervention there was a drop in Wichita's level of accidents per 100,000 while the level for the rest of the State increased. It should be noted that both time series plots for Wichita, and rest of State dropped at the point of intervention (TOP) however, Wichita's dropped further and remained at a level lower than the rest of the State.

Figure 3 reveals the time line for arrest rates in Wichita before and after TOP. The Figure shows an increase in number of arrests as the TOP began. It appears that the increase in arrests may have influenced the DWI driving behavior in Wichita, and thus the crash data shown in Figure 2, the time series plot, as well as change in accident rates in Figure 1. However, arrests by themselves are not the only input, for example, Public Information and Education, as well as Conviction rates may have influenced the citizens' drinking and driving behavior.

Spokane, Washington

Figure 4 reveals the relation between the average number of crashes per month and the average number of DWI arrests per month in Spokane County before and after the TOP. The TOP program went into effect in 1981. Fatal accidents were fairly stable, decreasing in 1983 as Spokane City Police and Spokane County Sheriff's Office increased the average number of arrests per month. Spokane County crashes (injuries) decreased after TOP (1982) and continued to decrease in 1983, paralleling the arrest activities of the Spokane centered enforcement agencies. In 1984, crashes are seen to increase, but this is based on only partial year data.

There are interesting trends for arrests by the Washington State Patrol (WSP) which showed the most active arrest record. In 1983, WSP arrests dropped while those of the County Sheriff's Office increased. However, in 1984, as WSP increased activity, the County Sheriff's officers appeared to decrease. There appears to be no clear causal explanation for this relation, and it may be unrelated to events within the scope of the TOP project (for example, a realignment of responsibilities). The Spokane City Police Department, however showed consistent increases in the number of arrests per month.

DWI crashes decreased initially with TOP, from an average of 49 per month to an average of 46 per month. Similarly, average Fatal Crashes per month decreased, however, Total Fatalities, DWI and non-DWI fatality frequencies are so low, that nothing discernible is evident.

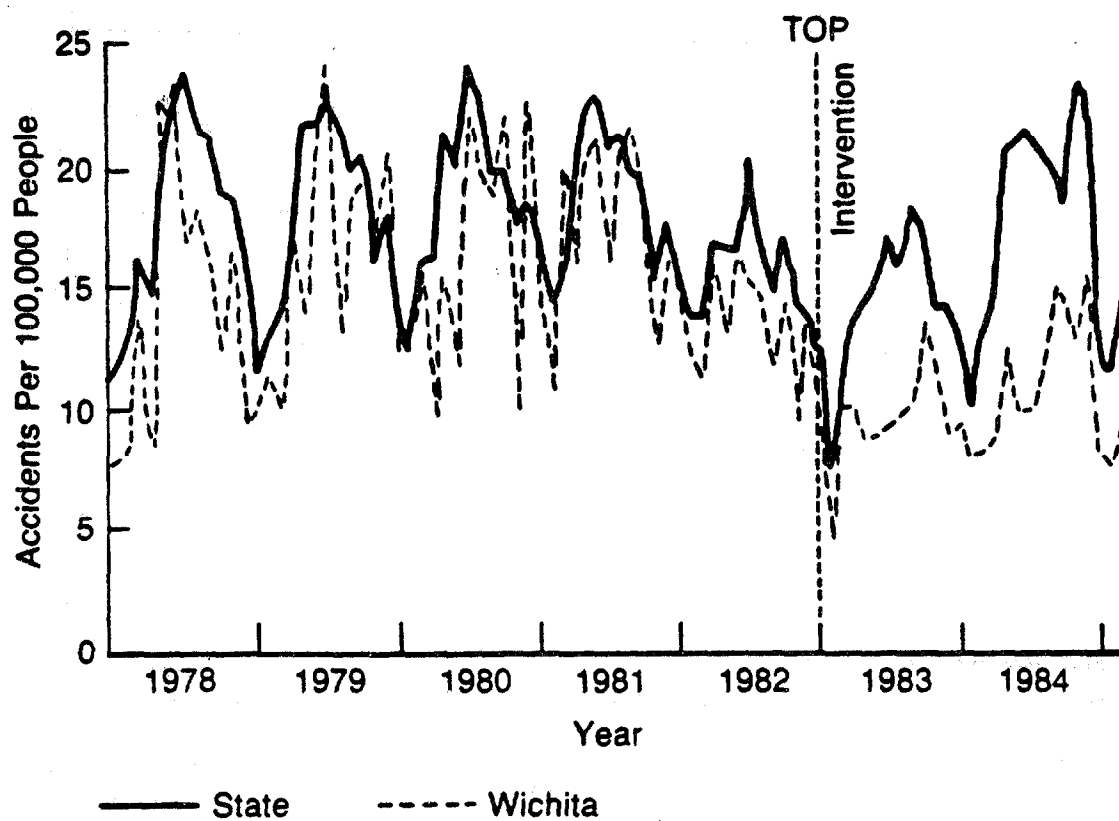


Figure 2. Comparison of All Categories of Accident Before and After TOP for Wichita and Rest of the State of Kansas.

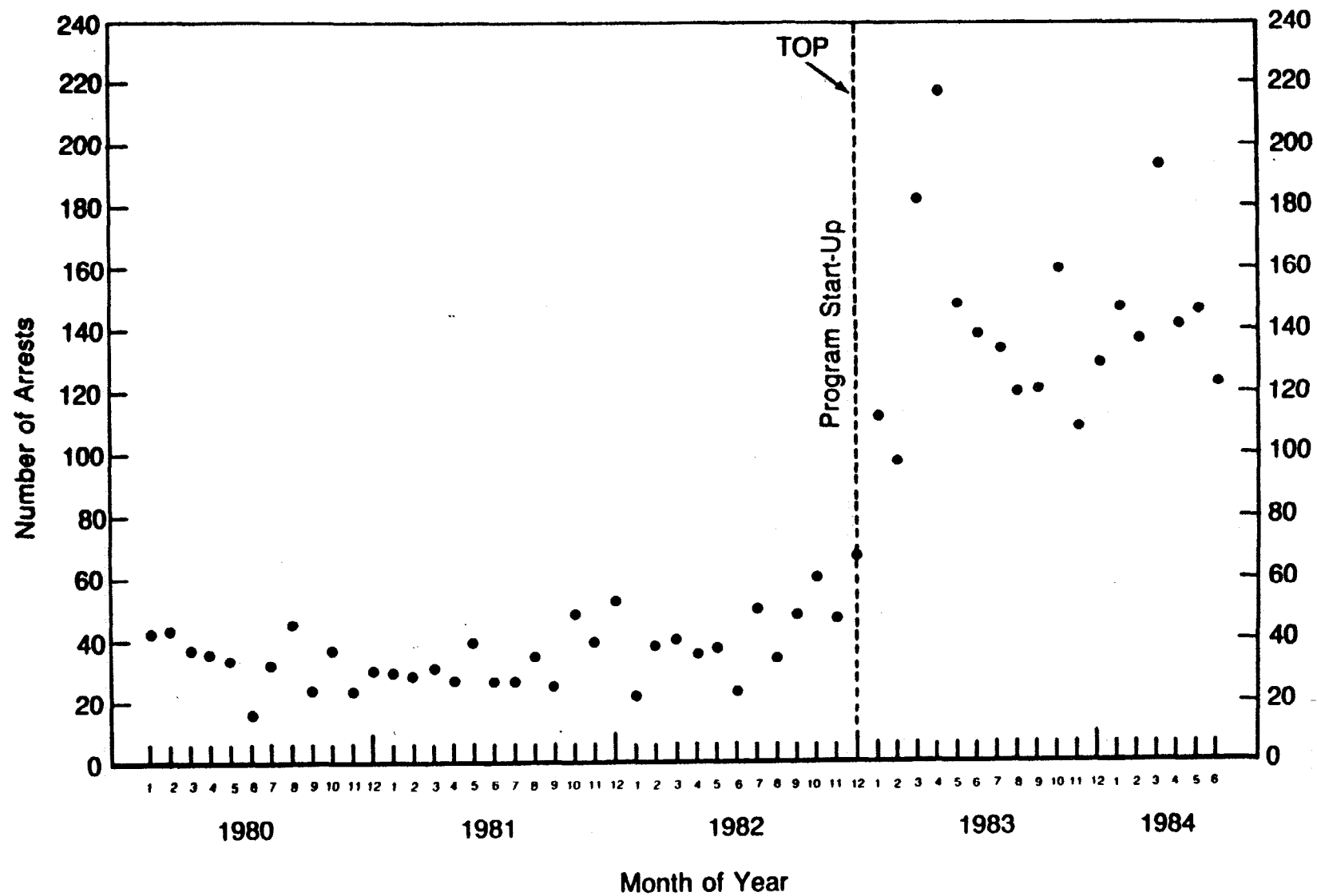


Figure 3. Frequency of Arrest in Wichita Before and After TOP.

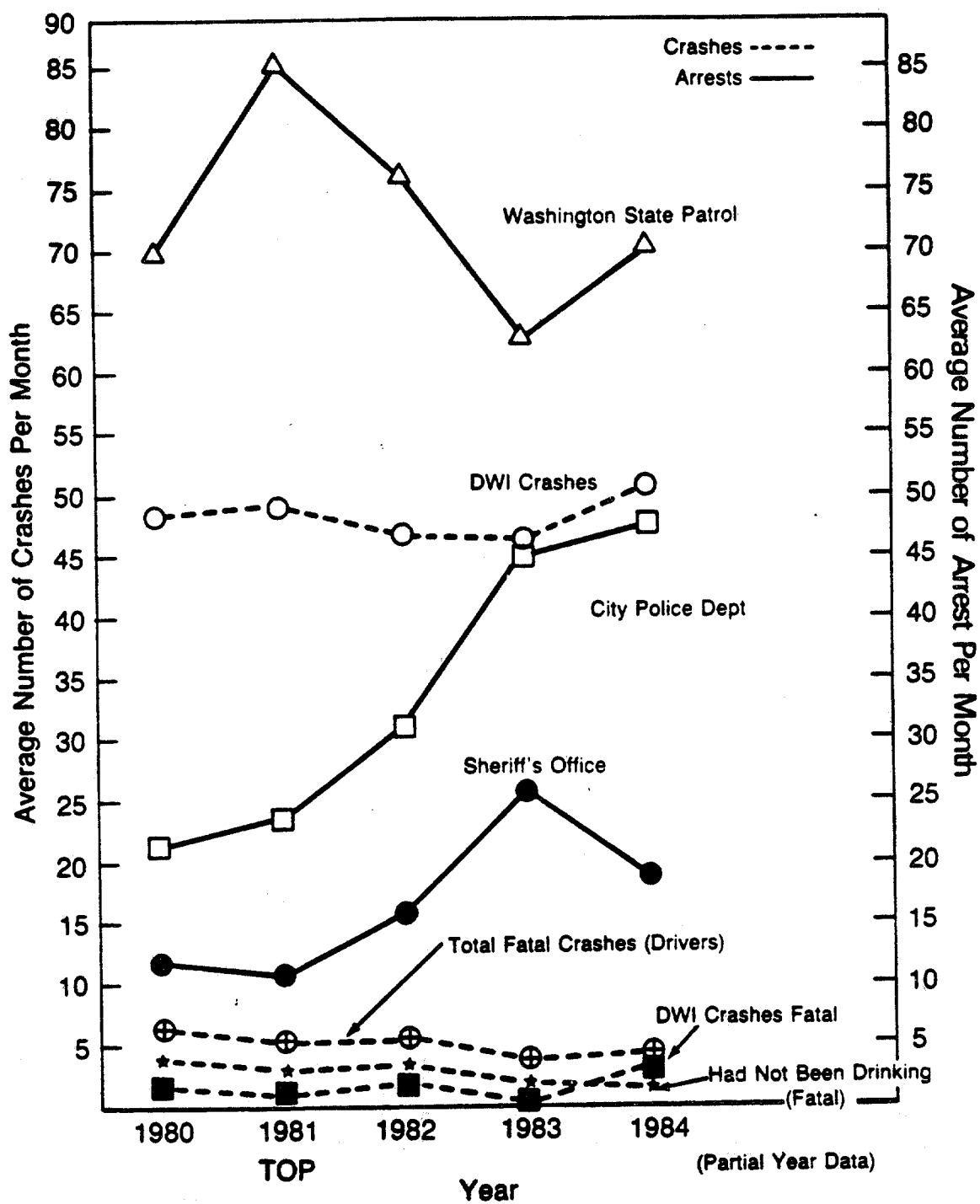


Figure 4. Alcohol Involved Crashes and DWI Arrests in Spokane County Before and After TOP.

Figure 5 indicates the "Proportion of Spokane Drivers in Motor Vehicle Collisions Before and After TOP Who Had Been Drinking". Data for Spokane County is compared with the rest of the State. Data for 1984 includes the first six months only.

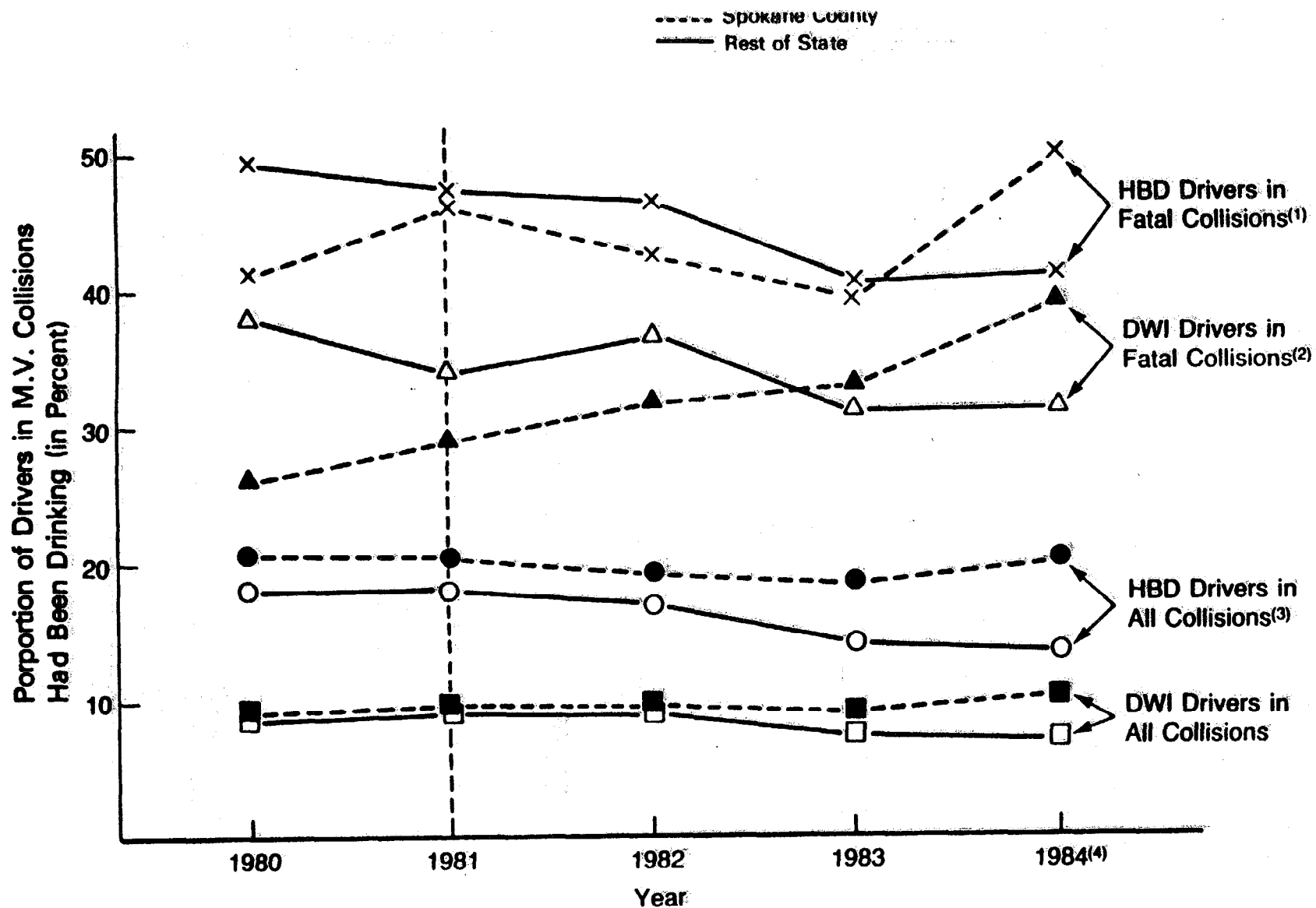
Figure 5 reveals in more detail the results reported in Table 1 for Spokane's Impact Evaluation. Significant differences are found pre- and post intervention for drivers who "Had Been Drinking", HBD. The pair of lines at the top of Figure 5 illustrate this finding. Spokane County Had Been Drinking (HBD) fatal collisions increased from 1980 to 1981, however, with TOP intervention, the proportion dropped consistently during the next 2 years. The increase in 1984 is based upon partial year data only.

The rest of the State showed a fairly stable, slightly downward trend from 1980 to 1982, through the period of TOP intervention. However, the "HBD" drivers dropped suddenly in 1983, and remained fairly stable, with slight upward trend for 1984.

As Table 1 revealed, there were no significant differences between Spokane County and the rest of the State in terms of alcohol related accidents. The two lower data sets in Figure 5 illustrate the parallel decrease in accidents found both in Spokane County, and the rest of the State. There is a slight decrease in the Spokane County "HBD drivers in all Collisions" following TOP intervention, however that is paralleled by data from the rest of the State and may indicate the general effectiveness of traffic safety programs in the State of Washington.

The most unusual data set is that illustrated by "DWI Drivers in Fatal Collisions". The Spokane County data increases slightly, but steadily from 1980 to 1984 (Pre- and post TOP), however, data for the rest of the State drops in 1981, increases in 1982, then drops in 1983, apparently remaining steady through the first six months of 1984's data. This "rest of State" trend may reflect the effectiveness of other programs within the State. It should be recalled from Figure 4, that the number of DWI fatal crashes in Spokane County hovered around an average of two per month -- frequently there were no fatal DWI accidents. It should also be recalled that by comparison, Figure 4 indicates the DWI related personal injuries decreased during this time period from an average of approximately 49 per month at TOP's 1981 initiation, to approximately 45 per month in 1983 (the increase in 1984 may reflect partial year data).

The time series plots in Figure 6 provide further detail on the relation between Spokane County "HBD" and "DWI" drivers before and after TOP. The time series plot for "HBD" drivers shows a consistent decrease after TOP intervention. Both "HBD" and "DWI" drivers' plots reveal a dramatic decrease following intervention. The plots for both drivers may indicate effects of seasonality -- general peaks and valleys of the charts seem parallel. However, the average trend (moving average) appears to be



(1) HBD = Had Consumed Some Alcohol, Regardless of Degree of Impairment.

(2) DWI = Ability Impaired Due to Alcohol Consumption.

(3) All Collisions = Includes Only Investigated Collisions Where Officer Indicated Sobriety Level on the Report Form.

(4) 1984 Includes Data from the First Six Months Only.

Figure 5. Comparison of Drivers in Motor Vehicle Crashes Who Had Been Drinking: Spokane County and Rest of State Before and After TOP.

(Adapted from: Spokane County TOP Final Report, 1984)

fairly constant for DWI drivers, while a consistent decrease is revealed for "HBD" drivers (until 1984's partial year data). Table 1, as well as Figure 5 revealed that "HBD" drivers showed significant differences before and after TOP intervention.

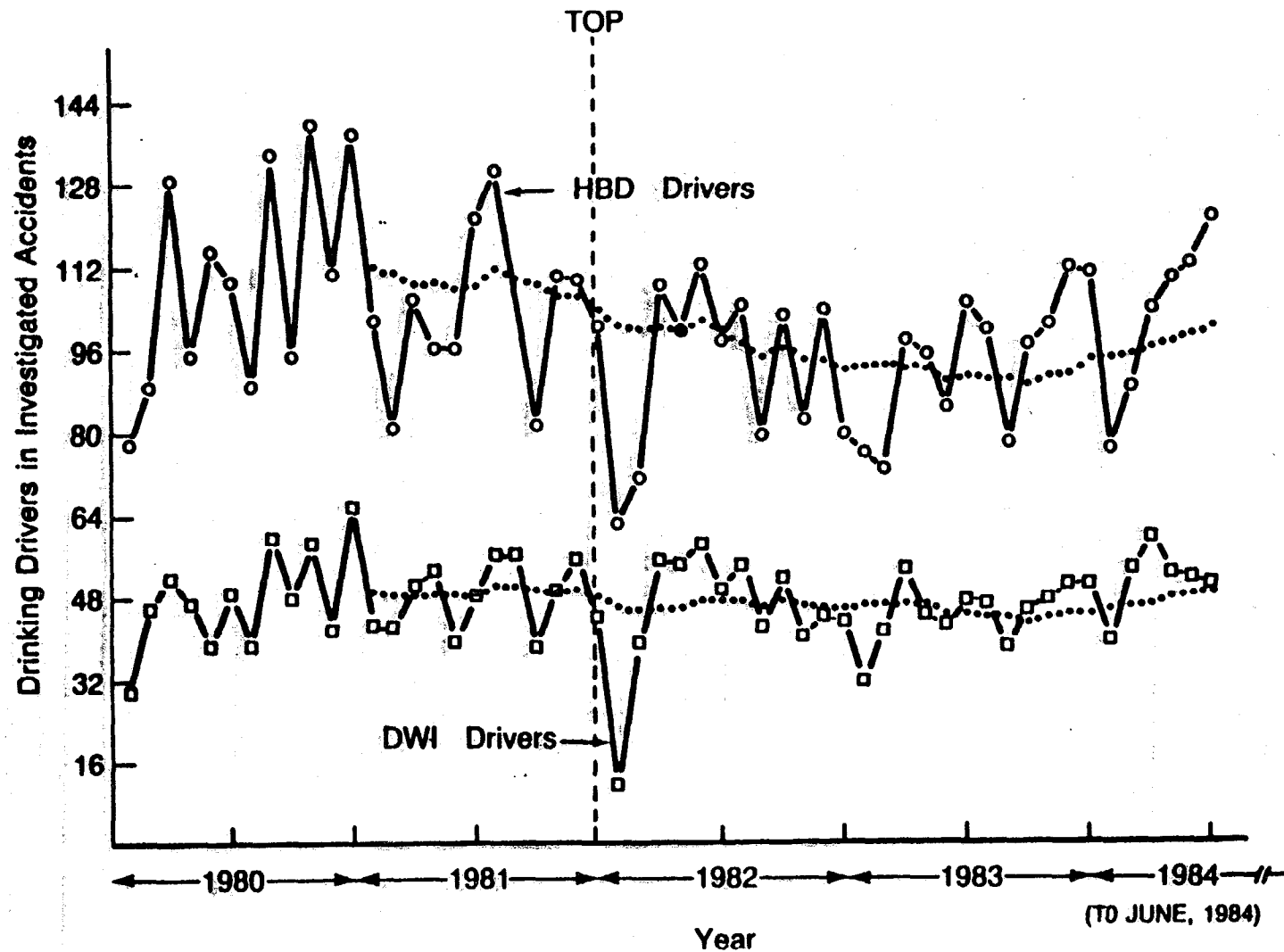
Figure 7 provides additional information concerning the arrest rates revealed in Figure 4. Combined DWI arrest rates for Washington State Patrol (Spokane County detachment), Spokane City Police Department, and Spokane County Sheriff's Office, indicate a consistent increase following TOP intervention.

The line drawn through the data plot represents a statistical technique called a regression equation. This straight line describes the relation between DWI arrest and time. A mathematical equation developed for the line is called a regression equation or predicting equation. Given the time dimension, "x", one can predict the number of arrests ("y") which would be made by the enforcement agencies in Spokane County. The notation " r^2 " refers to the amount of explained variation due to the regression equation. The figure ".52" indicates that over half the variance in the dependent variable ("y", number of arrests) is accounted for by the time factor ("x"), the independent variable. The regression equation also indicates a high correlation, .72, between DWI arrests and time. Figure 7 also indicates a strong positive relation between DWI arrests and the operation of the TOP during the TOP time frame.

The time series presented in Figure 8 provides a more detailed perspective of DWI arrests: essentially a closer look at data related in Figures 4 and 7. Figure 8 reveals the DWI arrests by specific enforcement agency over time before and after the Spokane County TOP intervention. Clearly the greatest number of arrests across time were made by the Washington State Patrol, perhaps as a result of their attention to Interstate and major State highway systems. The fewest arrests across the board were made by the Spokane County Sheriff's Office. The Spokane City Police DWI arrests increase steadily following the TOP program.

All three groups showed an increase at the point of intervention, with the greatest increase shown for the Washington State Patrol (Spokane detachments). This may be expected, given the overall attention to alcohol related activities in the State, as well as to the WSP's attention to highways and Interstate routes (more heavily travelled areas).

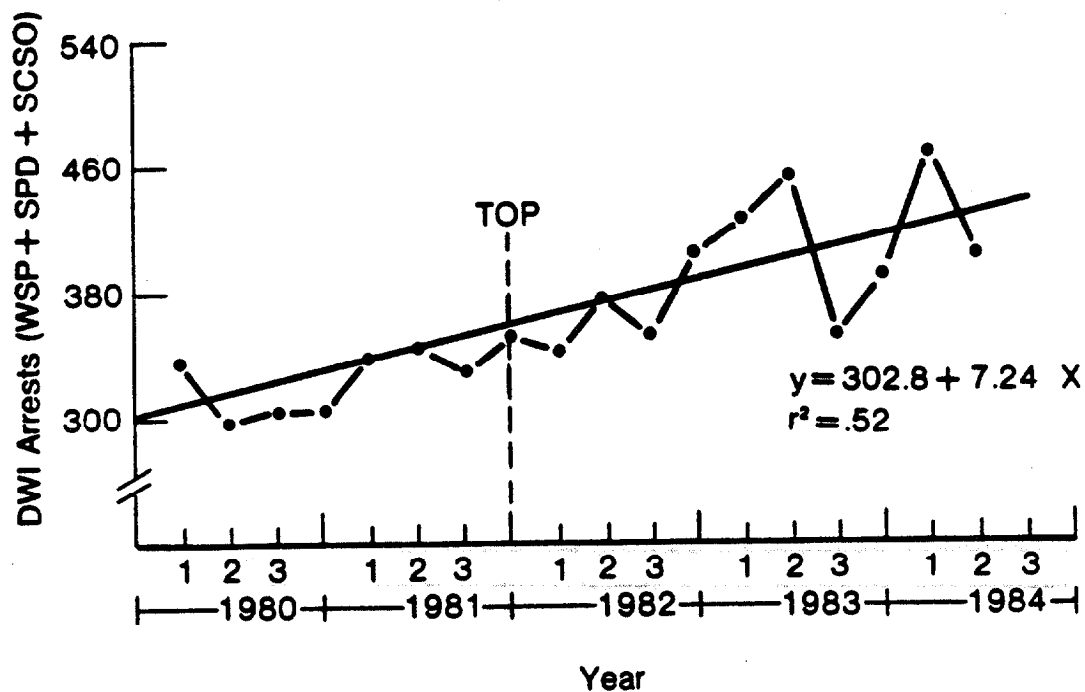
Figure 9 provides a closer view of the Spokane City Police Department and the Spokane County Sheriff's Office. By setting aside the Washington State Patrol, which may be influenced by other State 402 projects, and concentrating on the Spokane centered enforcement agencies, a more accurate relation between the Spokane TOP and the Spokane enforcement agencies' DWI arrests can be revealed. The time series' moving average for both enforcement agencies reveals relatively constant DWI arrest rates prior to TOP (25 per month for the City Police, 10 per month for the Sheriff's Office). However, both time series show an increase at the



- HBD (Had Been Drinking) = Had Consumed Some Alcohol, Regardless of Degree of Impairment
- DWI (Drinking While Intoxicated) = Ability Impaired Due to Alcohol Consumption

Figure 6. Comparison of Spokane County Drinking Drivers Before and After TOP.

(Adapted from: Spokane County TOP Final Report, 1985)



WSP = Washington State Patrol
(Spokane Detachment)

SPD = Spokane City Police Department

SCSO = Spokane County Sheriff's Office

**Figure 7. Combined Enforcement Agency DWI Arrest
for Spokane County Before and After TOP**

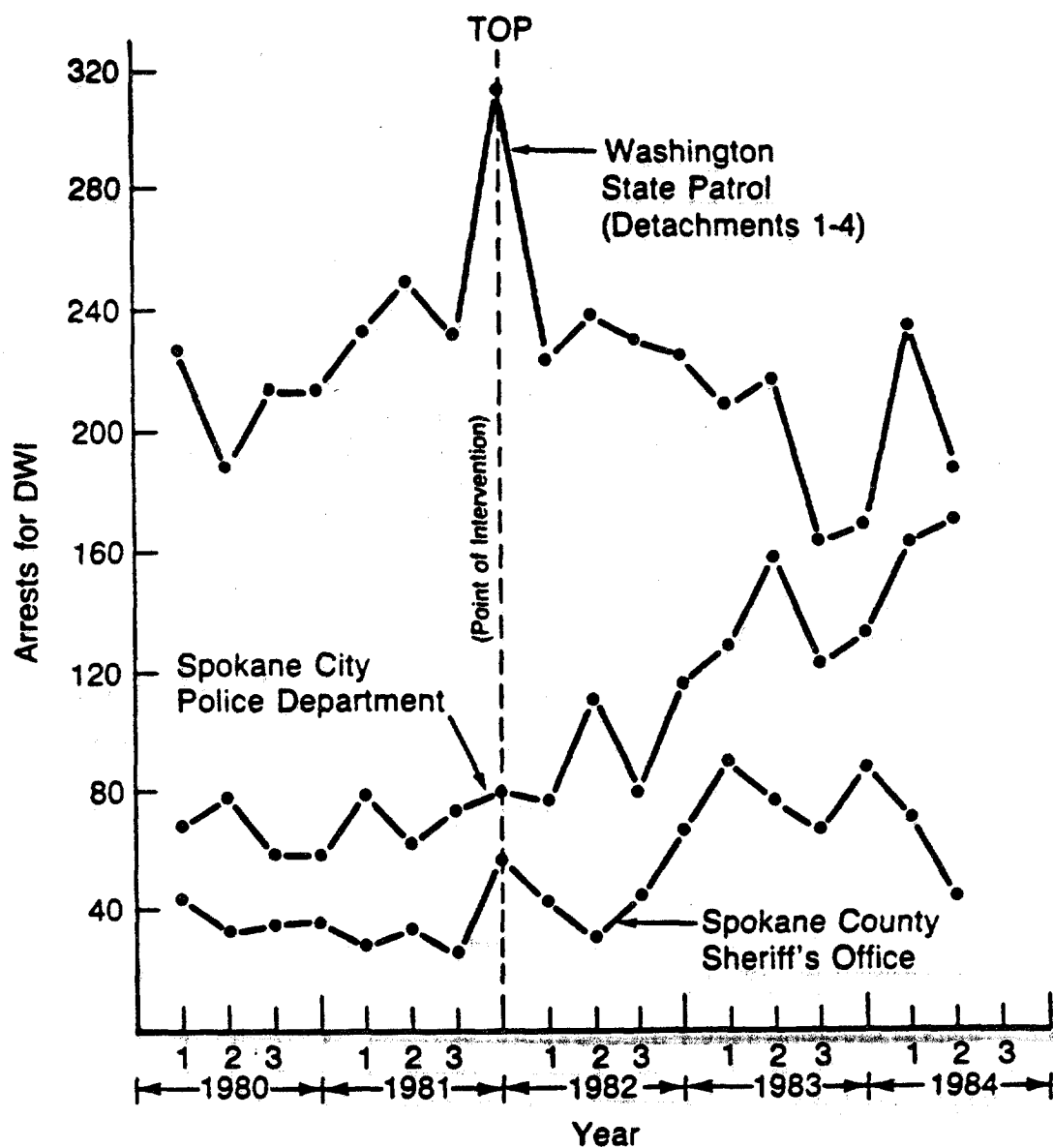


Figure 8. Arrests for DWI by Enforcement Agency Before and After Spokane County TOP.

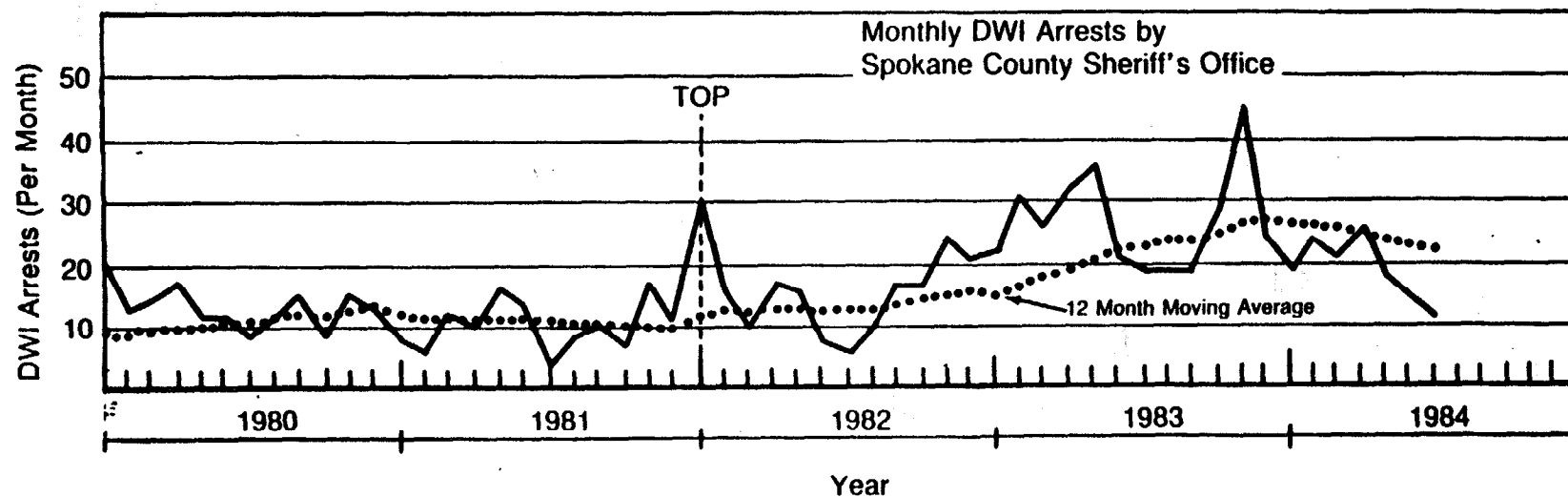
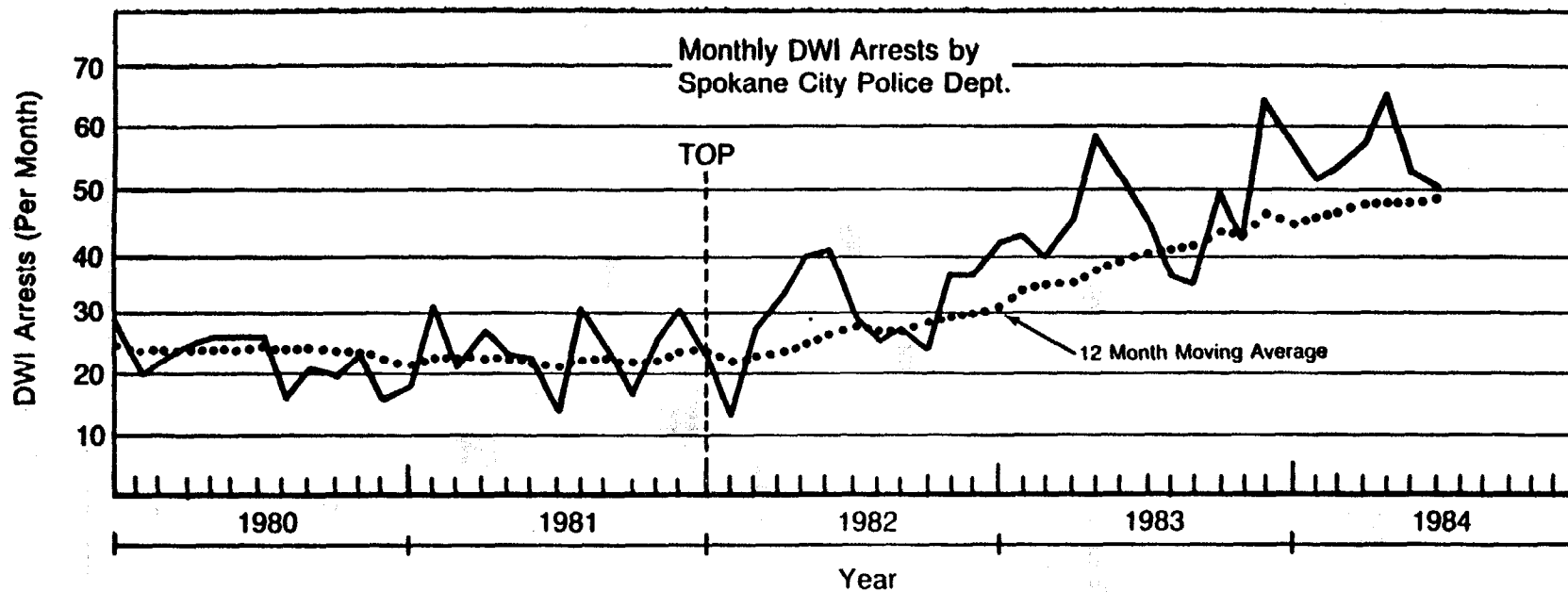


Figure 9. Comparison of Time Series for DWI Arrests by Spokane Centered Enforcement Agencies Before and After TOP.

point of intervention and a basic trend of increasing activity over the next three years. For both agencies, there are peaks and valleys in terms of average number of arrests per month. However, the trend represented by the moving average clearly indicates a positive increase in number of arrests. It is this pre- and post data which parallels the statistically significant findings presented in Table 1 for Impact Evaluation of Crash Data.

As also mentioned in Figure 5, HBD drivers showed a significant decrease in accidents pre- and post TOP. It is possible that the DWI arrest trend data shown in Figure 9 helps to explain the change in driver habits. The number of arrests, and hence the perception of risk increased. Results from the Spokane attitude survey (Table 2) seem to support this view. There was an increase in "healthy attitudes" toward drinking and driving, including a decrease in the number of respondents indicating they drink and drive (32% in 1983, down from 51% in 1981), an increase in number of respondents who say they do not drink at all (34% in 1983, up from 26% in 1981). Finally, in 1983, 89% agreed there was a drinking problem in Spokane, an increase from 72% in 1981.

Springfield and Waukegan, Illinois

Figure 10 reveals the relation between alcohol related crashes and arrests. The TOP defined alcohol related crashes in terms of a surrogate measure: those accidents occurring between 9 p.m. and 6 a.m. Average number of arrests for Springfield increased sharply and steadily over time, while arrest rates in Waukegan initially higher than Springfield, leveled in 1981, were almost met by those for Springfield in 1982, then dramatically increased to an average of 140 from an average of 50 per month in 1983 (year of TOP implementation). Although arrest data were not available after 1983, alcohol related crashes dropped in 1983 and the trend seemed to continue into 1984, even though the 1984 data is for a partial year.

It is important to note the data for all crashes in both cities seem to be parallel, dropping slightly in 1982, prior to the TOP implementation, then decreasing further with the TOP and increasing arrests; finally, crash rates stabilized or continued to decline in 1984. A further relation between arrests and crashes can be noted by each city's different average number of crashes per month for the various alcohol related accidents when compared with the city's average number of arrests per month. Compared to Springfield, Waukegan has lower average number of "weekend night crashes", "night crashes", and "night injury crashes". Waukegan also had a consistently higher average number of arrests per month.

State of Delaware

Delaware presented an unusual environment. Debate about the State's Driving Under the Influence (DUI) law began in 1981. The law passed in July 1982, was enacted in October 1982, however errors in the law involving the Governor's

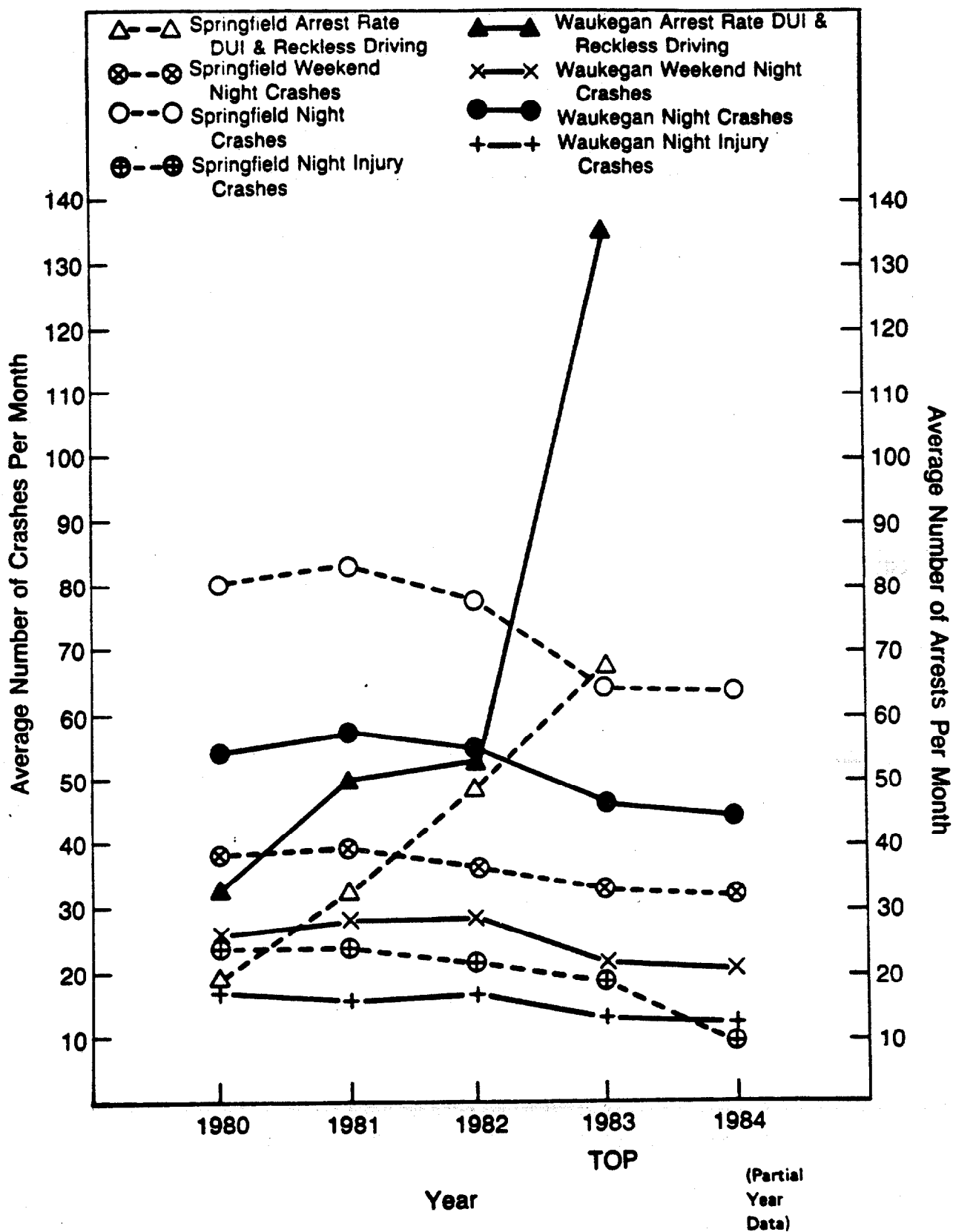


Figure 10. Alcohol Related Crashes* and Arrests for Springfield and Waukegan Before and After TOP.

*Crashes Occurred Between 9 p.m. and 6 a.m.

veto power, highlighted during a law suit (Perry v. Decker, see Appendix B) resulted in the law being declared illegal. Corrections to the law were made and in February 1983, the law was re-enacted. The TOP was implemented in January 1983.

Publicity including news broadcasts concerning the DUI Law enactment, court trials, revocation and re-enactment of the law, insured that the citizens of Delaware were aware of DUI issues before TOP was implemented. Results of the July-August 1983 attitude survey for the State (Table 2) reflected respondents' familiarity with the issues: 68% felt DUI was a serious problem, 76% believed that compared to last year (1982) DUI drivers were more likely to be stopped by police, and 80% believed that compared to last year (1982), DUI drivers were more likely to be convicted. It should be noted that when respondents were replying (July-August 1983) the DUI Law had been re-enacted for 6 months and the reference to "last year" was to a period of controversy concerning the legality of the DUI law enacted in October 1982.

Figure 11 reveals the relation between alcohol related crashes and DUI arrests for Delaware before and after the TOP (and the re-enactment of the DUI law). DUI arrest rates for the State increased sharply from 1981 to 1982, when debate on the DUI law was occurring in the legislature. The arrest rate shows a similar almost parallel sharp increase after TOP was implemented, and the DUI law re-enacted in 1983. Interestingly, when the DUI law's legality was brought into question, the arrest rate, although on the rise, showed a much smaller slope, perhaps reflecting the ambiguity of the enforcement procedures for a potentially illegal law. The Department of Public Safety began enforcing the law on October 20, 1982; a driver named B. Perry was arrested for DUI on October 27, 1982 7 days after the law went into effect. The State intended action to revoke Perry's driver's license; Perry charged that the law was illegal. The court upheld his complaint.

The alcohol related crash data shown in Figure 11 reveal consistent decreases after 1982, when the DUI law was enacted. The alcohol related highway personal injuries began decreasing in 1980, continued to decrease during 1981 (as debate on DUI began, dropped dramatically with the passage of the 1982 DUI law, and continued to decline after the TOP began and the DUI law was re-enacted. Alcohol related crashes increased from 1981 to 1982, but dropped after the initial DUI law was passed, and continued to drop after the TOP began and the DUI law was re-enacted.

The debate concerning DUI law's legality may have served as a reminder of the effects of drinking and driving - the perception of risk from injury may have influenced drivers, even though the enforcement of the law and potential for arrest during late 1982 apparently was not as great as at other times. This may indicate that at some point and under certain circumstances, the perception of personal harm may be more influential than the perception of arrest in changing driver's behavior. Although alcohol related fatal crashes appear to be somewhat stable, they decrease with enactment of the law in 1982, and continue to decline.

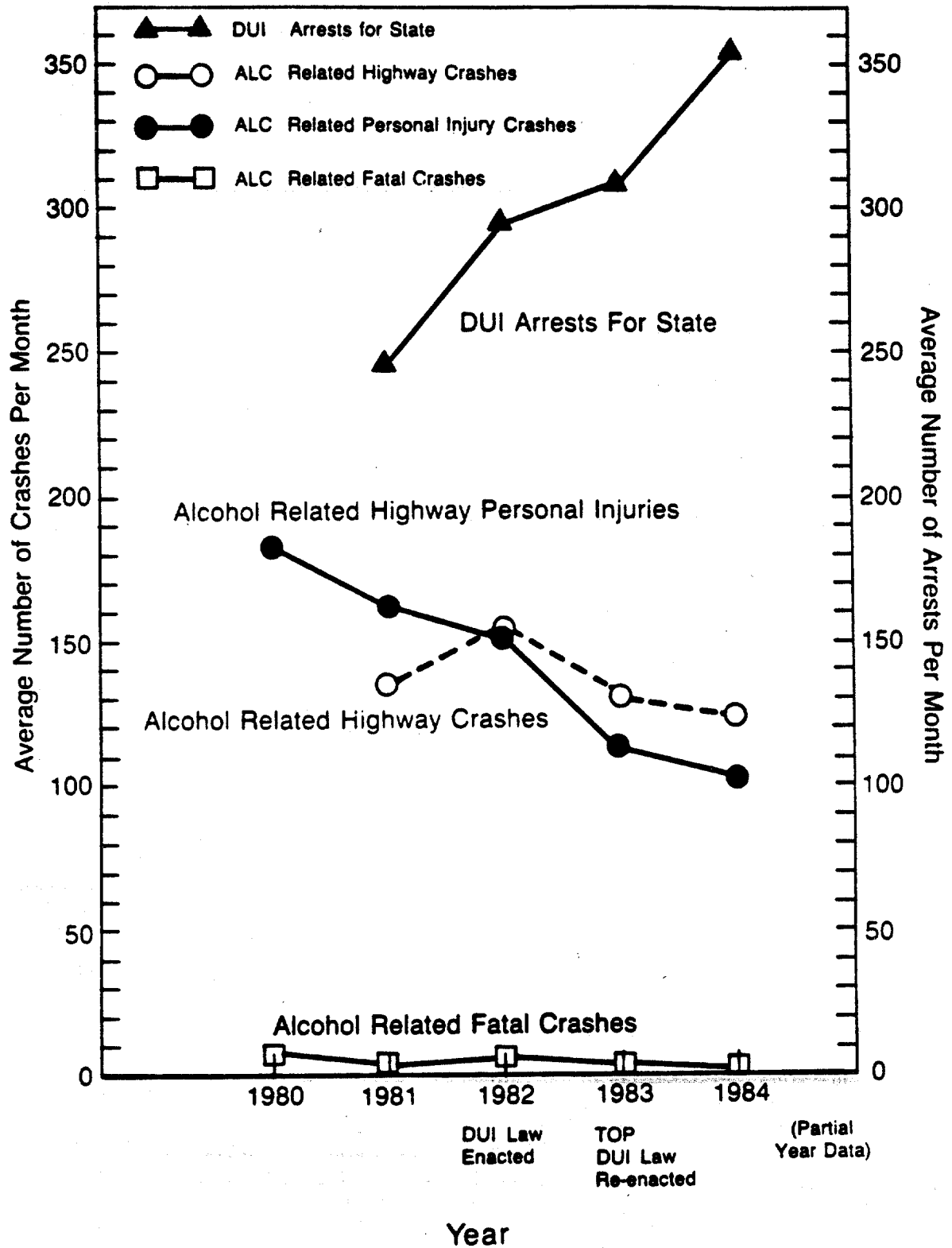


Figure 11. Alcohol Related Crashes and DUI Arrests For Delaware Before and After TOP.

The time series displayed in Figure 12 indicates the DUI arrests by Delaware State Police before and after TOP. The Figure provides another view of the data shown in Figure 11. Peaks and valleys in Figure 12 seem to occur routinely, indicating the influence of seasonality decreasing every 6 months, in June and January, perhaps reflecting vacation of enforcement personnel. Figure 12 shows the sharp increase in arrests between January 1981 and late 1982 prior to DUI law enactment, the same pattern shown in Figure 11. Although there were sharp drops in arrests in January 1982, and June 1982, the overall trend (12 month moving average) increases sharply. There are two intervention points: The October 1982 DUI law enactment, and February 1983 DUI re-enactment. The TOP was implemented in January 1983. It is the interaction between these interventions which is of interest. The dramatic drop in arrests during October following enactment may be related to seasonality, and possibly the suit filed by Perry who was arrested for DUI seven days after the law was enacted.

The moving average shows that arrests between the two interventions are essentially constant. The drop in arrests in February 1983 may be similar to the other 6-month seasonal drops (January 1982, June 1982, June 1983, January 1984). Although the trend decreases initially after re-enactment of the DUI law, the trend increases as time passes. The moving average clarifies this trend, dropping slightly after the February intervention, but then increasing.

The time series in Figure 13 provides detail for alcohol related highway fatalities before and after TOP and the DUI laws. It appears as if the time series may be influenced by seasonality. The fatalities seem to increase in the summer, but appear to decrease during winter months. Hence the dramatic decrease in fatalities in December 1982 and January 1983, following the October DUI law, should be compared with drops during January 1980, January 1981, January 1982, and January 1984. By contrast, the moving average reveals a fairly stable fatality rate, decreasing from June 1980 to June 1981, raising slightly but holding constant until June 1982; decreasing in July (when DUI law passed), and essentially continuing at the lower level through the two interventions. It is possible the passage of the law in July 1982 and the discussion concerning it may have been a more important factor than enactment or re-enactment of the DUI law or the implementation of the TOP.

Figure 14 presents a time series displaying alcohol related highway personal injuries before and after TOP and the DUI laws. As with the previous time series, there appears to be a seasonal effect: injuries seem to decrease in January and increase in June and December. This possibly may be related to vacations, holidays and weather. Figure 14 reveals a sudden and dramatic decrease in personal injuries following the DUI law's October 1982 enactment, continuing through the January 1983 implementation of TOP and the February 1983 re-enactment of the revoked DUI law. The drop following the October intervention seems to break the seasonal trend. When the increase in injuries occurs, the trend is lower than that shown prior to interventions. The moving average more clearly reveals the activity. The injuries are fairly stable from December 1980 to June 1982, however there is a sudden decline in June, continued in July (when the DUI law was passed). The slope of decline

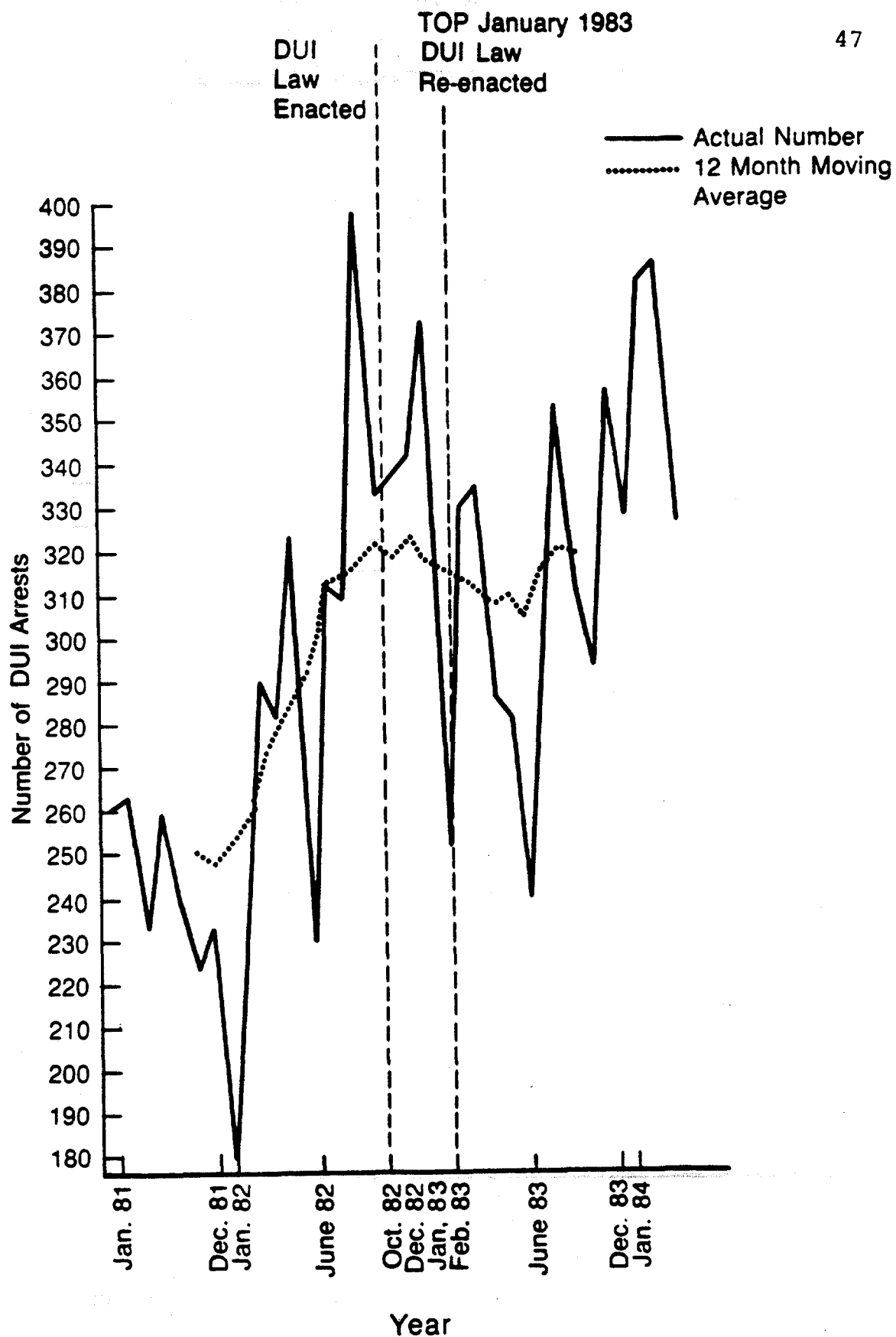


Figure 12. DUI Arrests by Delaware State Police Before and After TOP and DUI Laws.

(Adapted from: Delaware TOP Report, 1984)

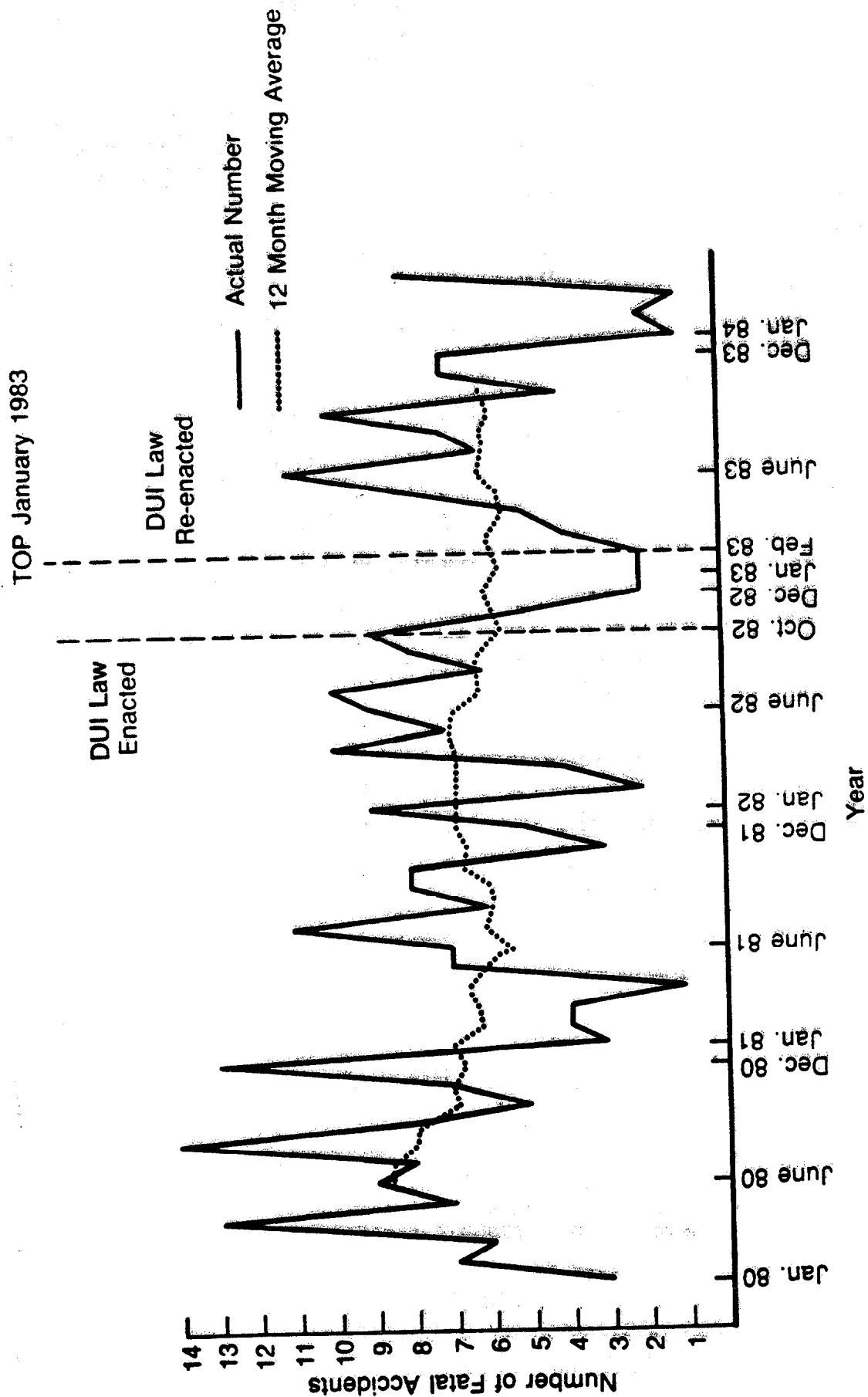


Figure 13. Alcohol Related Highway Fatal Accidents Before and After Delaware TOP and DUI Laws.

(Adapted from: Delaware TOP Report, 1984)

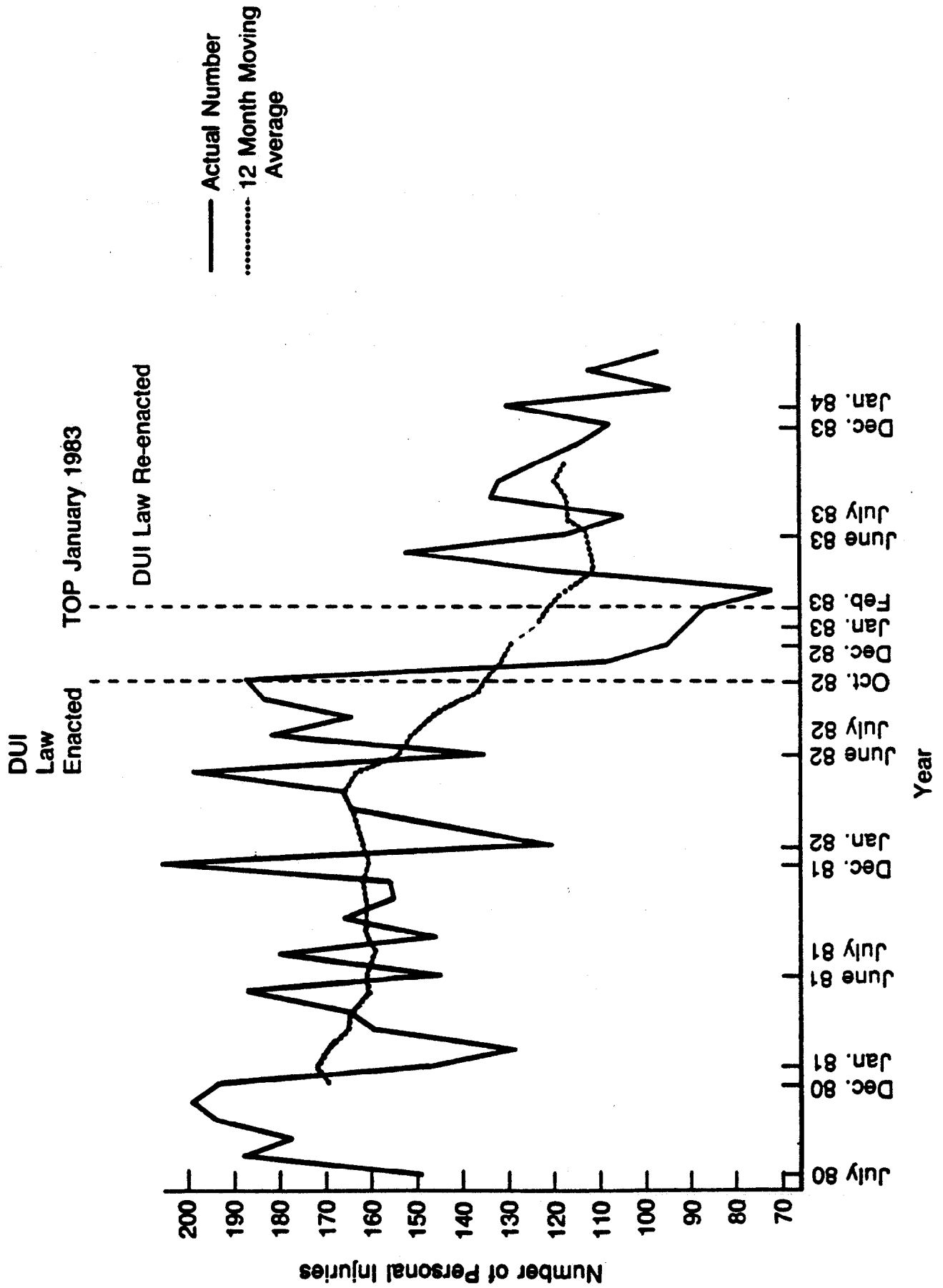


Figure 14. Alcohol Related Highway Personal Injuries Before and After Delaware TOP and DUI Laws.
(Adapted from: Delaware TOP Report, 1984)

continues sharply through the intervention periods, leveling by June of 1983, but slightly increasing in July. Generally, the trend decreases with time. There is a clear drop in level of activity before and after the interventions indicating their apparent effectiveness on alcohol related personal injuries.

Figure 15 presents a time series for alcohol related highway accidents before and after the interventions. The moving average indicates a decrease in level of activity before and after the interventions. The accidents increase from June 1981 to June/July 1982. Apparently following the July 1982 passage of the DUI law, the trend (moving average) decreased sharply continuing through both interventions and into June 1983. The average increased slightly from June to December, but the slope is much lower than that between June 1981 and December 1981. The continuous decline in alcohol related crashes from the July 1982 passage of DUI law, may indicate the importance of the law's passage, rather than enactment, in terms of driver behavior and alcohol related crashes.

It should be noted that although the DUI law was declared illegal in 1982, the alcohol related highway crashes continued to decline. It is possible that the debate of the drunk driving issues and increased awareness of potential harm while Driving Under the Influence may have been more effective than the enforcement of the law in changing patterns of alcohol impaired driving in Delaware during this time period.

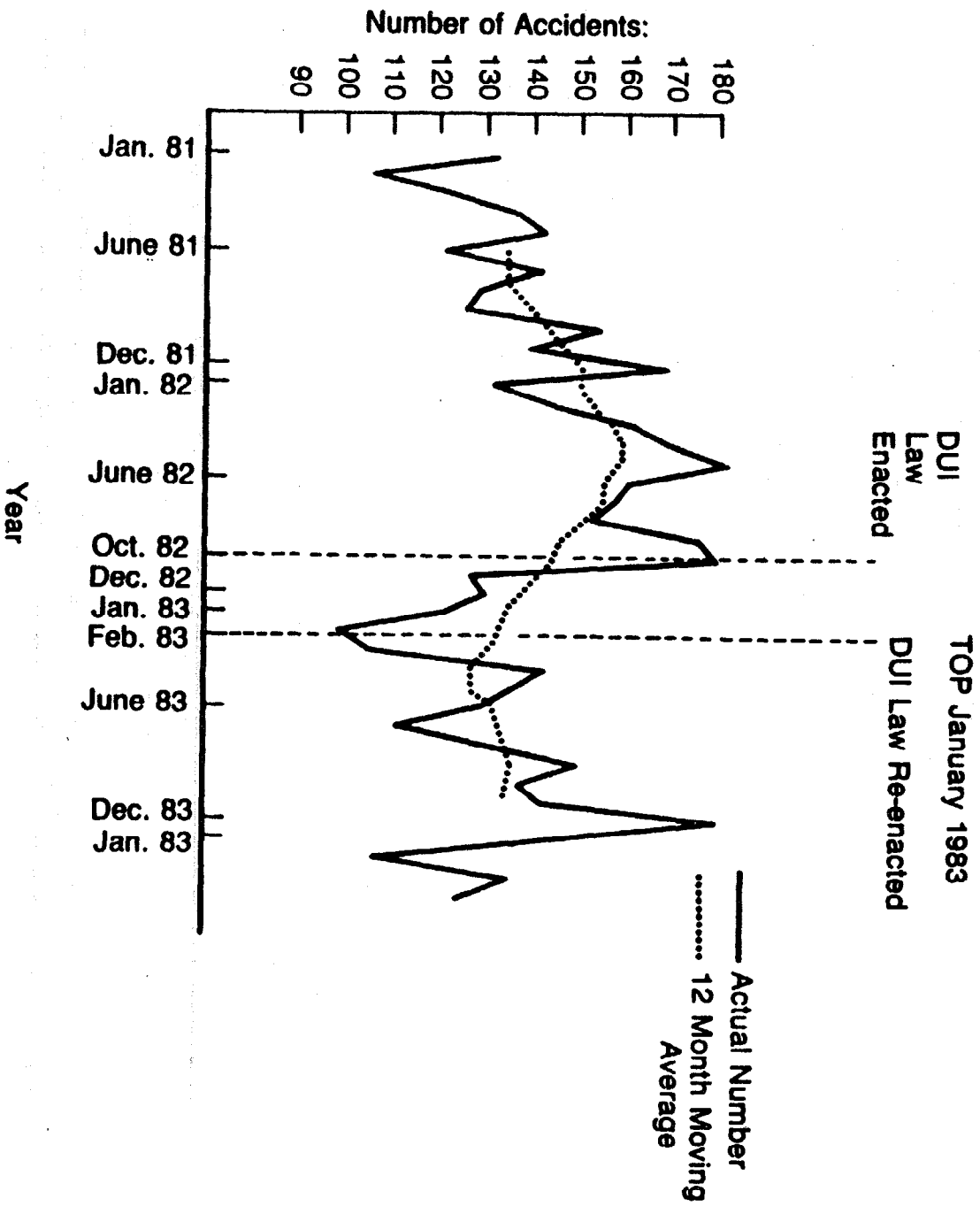


Figure 15. Alcohol Related Highway Accidents Before and After Delaware TOP and DUI Laws.

COMMENTS

The TOP concept developed from the recognition that different communities may have varying concerns with regard to alcohol and traffic safety issues. The basic concept was of a site oriented comprehensive alcohol safety program addressing the drinking and driving issues within a particular community.

Initiated in 1981, the program underscored the Administration's interest in the growing "grass roots" movement and a commitment to help communities help themselves. As a result, the point of emphasis has been decentralized from the Federal government to the States and communities.

The results have indicated that TOP projects can be a very effective approach to alcohol and safe driving issues.

The willingness of a community to enter into the complex process of developing a comprehensive alcohol safety program is in itself a substantial recognition that the community cares about traffic safety and is willing to make a public commitment to give more than lip service towards addressing the problem. With this as a premise, each of these Target communities can be considered to be on the road to some degree of success in curtailing the DWI problem.

Based on the reports and data submitted by the TOPs, the comprehensive community based general deterrence alcohol program is a feasible and effective program that can be implemented at the community level. Its degree of effectiveness, however, is directly related to the degree to which the elements of the comprehensive program are implemented. A fully implemented comprehensive program will almost always make some visibly significant impact toward reducing the magnitude of the problem. One cannot say, that full implementation of the elements of a comprehensive program will assure a guaranteed percent reduction in alcohol related crashes. However, full implementation of the comprehensive program will produce a significant, measurable reduction in the frequency and severity of alcohol related crashes. It is impossible to determine the separate effects of each of the six elements of a comprehensive program on the overall results. Consequently, one cannot determine which element is more or less important than the others. It is felt that all elements must be in place and fully operational. For example, some projects exhibited more PI&E and less enforcement in the general deterrence mix compared to others. At the same time, a significant reduction in alcohol related crashes was still observed. It is conceivable that a synergistic effect results from the public awareness and public support generated by the comprehensive alcohol program.

It is difficult to determine the mix of PI&E versus enforcement to create maximum general deterrence effect. More of each would lead one to conclude that it would be more effective, but how much of each relative to the other is

not clear. However, PI&E appears to be of more importance than anticipated. The Salt Lake County Target had generated a high level of PI&E during the 1982-1983 period without significant increases in arrests. However, impact in crash reduction is highly significant for alcohol related accidents. The non-alcohol related crashes remained fairly constant throughout the project's operation.

Program direction/coordination also appears to be a very important ingredient in making the comprehensive community based program work. Without it, the project cannot function. Those communities that developed task forces and appointed project director/coordinators were more effective in establishing a well throughout program. The project director/coordinator must be able to make things happen. In the planning stages, he/she must be able to get a task force organized, obtain an assessment of the current status of the alcohol program, put together with the task force an operational plan which is realistic and has the capability to impact the problem. Attention must be paid to having all the key agencies involved from the inception of the project. Additionally, evaluation plans must be developed based upon existing data availability and resources. Data not available requires additional resources to produce. Strong program direction/coordination is required throughout the life of the project. Monitoring operations, resolving problems, coordinating activities with the local agencies and the task force requires a full-time coordinator. Without one, the effectiveness of the project is diluted.

A commitment and support of the police officials is a must to make the program work. They set the pace for increased enforcement activity. Further, training of police officers in the latest DWI detection techniques including the standardized Field Sobriety Test (revised), improves confidence and morale which in turn results in more successful arrests and convictions. In addition, it is possible that improved training may also motivate officers to become more effective in making DWI arrests. With regard to police agencies (State, County, local) it is important to note the cooperative efforts among various levels in DWI enforcement. For example, sobriety checkpoints operated as a joint effort by two or more agencies.

In connection with the need for strong project direction/coordination is the requirement that the project have the political backing and support of the local political structure. This provides the project coordinator with the required political support and influence necessary to make the community players interact and cooperate. Also, if a project is being planned at or around an election, it may be worthwhile to delay starting until the newly elected political party is in place and has had an opportunity to give the new project its blessings.

The comprehensive alcohol program is a fairly complex phenomenon. It requires the cooperation and commitment of many different social agencies, the political structure and project management. The program depends on the implementation of some rather dramatic changes some of which may not be within the control of the community, i.e., passage of a State law. This requires detailed planning and setting of objectives at the front end of the project combined with the serious commitments needed to attain these goals.

Geographic size and composition (population density, population mix, urban/rural, etc.) bear very heavily in contributing toward the success of the project. If the geographic size exceeds the span of control or dilutes resources, then consideration should be given to smaller, separate projects rather than trying to maintain everything under one umbrella. Small communities with low frequency crash incidence and limited resources to collect data make it virtually impossible to conduct any impact evaluation (i.e., crash reduction). However, if the concept produces crash reductions in larger communities, then it can be safely assumed to have some impact on the smaller communities although unmeasurable. Data collection and reporting has been a serious shortcoming in attempting to evaluate the performance and impact of most of the targets. Adjudication data seems to be the most difficult to obtain because of the non-centralized structure of the courts and the lack of resources to collect the data. If there are active citizen groups within the target site, it may be worthwhile to solicit these groups as volunteers to collect the data necessary to measure countermeasure performance. Both project management and citizen groups would mutually benefit by this data collection effort since it would provide information on the progress of the project and the effectiveness of each group's activities.

RECOMMENDATIONS FOR FUTURE COMMUNITY BASED PROGRAMS

1. In order to improve the effectiveness of target operations, a Task Force should be convened at the outset of the project and within the initial stages of the planning process so that Task Force members can direct the focus and scope of the project. This recommendation could be expanded to include a local Task Force to monitor progress in implementing the plan and in performing an annual assessment.
2. The Task Force chairman should have the complete support of the Chief Executive of the political jurisdiction within which the Target is to operate. In addition, the Chief Executive Officer must be continually reinforced so that his/her support does not diminish during the project's operations.
3. The target site should be of sufficient size to maximize the effectiveness of the elements of a comprehensive program. Generally, a community proceeds with an alcohol program because the community wants to address the drinking/driving problem. Prior to the establishment of a target site, its size should be evaluated based upon the available resources, estimated countermeasure effectiveness, degree of coordination and direction required. Examination of these factors may result in reducing or increasing the target size to achieve greater effectiveness. From experience gained in the first ten targets, successful projects can be demonstrated at both the local community as well as the State level.
4. Project management and staff, Task Force members, participating agencies and legislators should recognize the need for a long term commitment to achieve the goals established in the plan. Ongoing review of the operations relative to the goals and objectives should be conducted. Deficiencies noted should then be corrected. In addition, project goals and objectives require periodic review to assure that they are realistic, attainable and timely.

5. Critical to the success of the community alcohol project is support, training guidance, etc., available from State Governor's Representative, NHTSA Headquarters and Regional offices. Based upon the assessment of the current operation relative to the goals and objectives established, a planned schedule of support activities must be developed which will fit appropriately into the project's operational planning. It must be carefully thought out in order for the support to be effective. Since much of the support is required up front, it may be more effective to stagger the start up of a number of targets.
6. Timing the kick-off of a project can also be critical to the success of the project. Delay of a project start-up prior to an election of a key official or officials may be worthwhile so that the project can be assured of continuity of support. If current supporters for the project are not reelected, the probability of support by the newly elected official may be greatly diminished.
7. Availability of performance and impact data which can be used to evaluate the specific progress and effectiveness of the project. Capability to structure evaluation data systems and perform analyses of project operations.

LIST OF TARGET OF OPPORTUNITY REPORTS

Wichita, Kansas:

Maynard-Moody, S., Palumbo, D., Scheurich, J., and Kruger, K. Final Report for the Wichita Comprehensive Program to Reduce Driving While Intoxicated. Institute for Public Policy and Business Research, The University of Kansas, Lawrence Kansas. 1986.

Spokane County, Washington:

Klingberg, C.L., An Evaluation of the Spokane County, Washington Driving While Intoxicated (DWI) Countermeasure Program. Washington Traffic Safety Commission, Olympia Washington. 1985.

Salt Lake County, Utah:

Juang, N., An Impact Evaluation of the Salt Lake Valley Target of Opportunity. State of Utah Highway Safety Division, Salt Lake City, Utah. 1986.

Utah Highway Safety Office, Salt Lake Valley Target of Opportunity Final Report. State of Utah Highway Safety Division, Salt Lake City, Utah. 1986.

Springfield and Waukegan, Illinois:

Schroeder, J.K., and Sidhu, C.S., The Target of Opportunity in Illinois: Evaluation Report. Illinois Department of Transportation, Division of Traffic Safety, Springfield, Illinois. 1985.

Nassau County, New York:

Dalton, K.M., and McCartt, A.T., Two Years of Accident Experience under STOP-DWI in Nassau County, New York: Interim Impact Evaluation Report for the Targets of Opportunity Program. Institute for Traffic Safety Management and Research, Albany, New York. 1984.

Salm, M.P., Smith, R.D., Targets of Opportunity Program Nassau County, New York. Administrative Evaluation, Interim Report. New York State Department of Motor Vehicles, Albany, New York. 1984.

McCartt, A.T., Dowling, A.M., Dalton, K.M., Carman, J.A., An Evaluation of the County STOP-DWI Programs in the Metropolitan Region: Nassau, New York City, Suffolk. New York State Department of Motor Vehicles, Albany, New York. 1985.

Miami-Dade County, Florida

Flynn, M.K., Two-Year Evaluation of the Dade County Comprehensive Traffic Safety Program. Office of the Dade-Miami Criminal Justice Council, Traffic Safety Program. Metropolitan Dade County, Dade County, Florida, 1985.

Coconino and Yavapai Counties, Arizona:

Arizona Department of Public Safety, Final Evaluation: Target of Opportunity Program. NHTSA Region IX, Coconino County, Arizona. Phoenix, Arizona. (no date).

Deitch, L.I., Final Evaluation: Target of Opportunity Program. NHTSA Region IX, Yavapai County, Arizona. Arizona Department of Public Safety, Phoenix, Arizona. (no date).

Baton Rouge, Louisiana:

Final Report: Target of Opportunity Program. City Court Project. Baton Rouge, Louisiana. (1987).

State of Delaware:

College of Urban Affairs and Public Policy, Evaluation of the Impact of Changes in Polices Affecting Drunk Driving in the State of Delaware. University of Delaware, Newark, Delaware. 1984.

Lynn, Massachusetts:

Harding, W.M. & Apsler, R., The Impact of the Targets of Opportunity Program of Lynn, Massachusetts as Reflected in Results from a Baseline, Interim and Final Follow up Survey of Lynn Drivers. Governor's Highway Safety Bureau, Boston, Massachusetts. 1988.

APPENDIX A

CASE STUDIES: TARGETS OF OPPORTUNITY

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WICHITA, KANSAS

The Target of Opportunity initiated its program in January 1983; but there was considerable groundwork laid in the preceding year. After only one year of operation, the Wichita Target has implemented the various components of the comprehensive community based alcohol program with a high degree of success.

Prior to initiation of the Target, on July 1, 1982, the State passed a new and much stiffer drunk driving law which provided for:

- 1) license suspension for refusal to submit to a BAC test
- 2) elimination of plea bargaining to a lesser charge
- 3) mandatory completion of an Alcohol/Drug Safety Action Program
- 4) specification of pre-sentence information for evaluation at offender's expense.

General Deterrence

Enforcement

Prior to the TOP, the risk of arrest for drunk driving in Wichita was low. In the years preceding the project, an average of only 400 DWI arrests were made a year in the community with 230,000 licensed drivers. Less than 0.2 % of licensed drivers were arrested for DWI, a figure far below 1.79 % which is considered necessary to increase the general perception of the risk of arrest for drunk driving.

To implement the goals of increased DWI arrests and reduced "down time" all 359 officers received training in detection, apprehension, case preparation, and court testimony. Two vans -- BAT mobiles -- were purchased, and eight para-professionals were hired and trained to operate the vans and their specialized equipment. The training, equipment, and new personnel have contributed to an increase in the frequency and speed of processing DWI arrests.

The improvement in both these areas has been dramatic. The "down time" was reduced to an average of one hour by the end of 1983. The number of arrests during the first year of the project was 1464, an increase of 266% above the base line. Arrests reached a high of 220 during April 1983, but during the summer months they tapered off to an average of 140 arrests per month.

Public Information and Education

With the assistance of the newly established community groups, a highly visible, ongoing public information program was established. The public information activities since the beginning of the TOP include:

1. Twenty television public service announcements were aired over 1,000 times.
2. Six radio public service announcements were produced, four of which were about the Wichita "Remove Intoxicated Drivers" program.
3. Thirty-six feature news stories and editorials in the Wichita Eagle-Beacon.
4. Numerous billboards and bus signs to promote the Report Every Drunk Driver Immediately (REDDI) program.
5. Several feature programs aired on local television that describe the community efforts to address the DWI problem.

When compared to the near absence of programs prior to the TOP, the efforts to shape public attitudes regarding the nature and seriousness of the crime of DWI have been taken seriously. It is doubtful that many residents of Wichita have escaped exposure to these media presentations.

Community Focus

To increase community involvement in the reduction of DWI, a Community Alcohol and Drug Abuse and Traffic Safety Advisory Team was assembled in December of 1982. This advisory committee included representatives of: law enforcement, the courts, schools, treatment programs, parents, the business community, city government, and the Kansas Department of Transportation. In addition, a local Coordinating Committee comprised of members of the criminal justice and the school systems was established in July 1982. These community groups completed a local assessment in September 1982, developed an action plan in that same month, and began implementation of a variety of programs in December 1982. These groups continue to be active in developing and overseeing the TOP.

System Approach

Central to the comprehensive approach to deterring the drunk driver is the integration and coordination of the local and State criminal justice system. Wichita realized in its planning phase, that a large number of DWI arrests accompanied by severe and swift punishment well publicized and supported by the courts would be required to impact the problem. In

order to create this general deterrence effect, the coordination and cooperation of all of the key agencies was necessary and was reflected in this plan.

To facilitate the timely and effective handling of DWI arrests two additional prosecutors and support staff were hired. However, delays are becoming a significant problem in handling DWI conviction. From July 1982 to June 1984, the average number of days from arrest to conviction increased from 67 to 182. In the same time period, the DWI court load and case handling increased from 28 to 1,206 cases. In the pre-TOP period, the DWI arrests remained fairly constant from month to month at a low level. DWI arrests dramatically increased but fluctuated during the TOP operation, causing a considerable variation in workload handling.

One of the concerns was that the increased effort in enforcement would overwhelm the ability of the courts to try offenders. To increase the capacity of the courts to try these DWI cases, Wichita promoted two part-time judges to full-time and approved the use of Night Court, which became operational in January 1984.

The increase in delays previously reported suggests that the courts have had considerable difficulty in dealing with the increased caseload. Even though the time delay has nearly tripled, the number of cases handled has increased by a factor of 17 over the period from July 1982 to June 1984. Only 27 DWI cases were handled in the second half of 1982, whereas 478 cases were tried in the first half of 1984. Clearly the courts, despite some difficulty, have responded to the increased case load.

The percentage of those arrested that were found guilty decreased from a high of 61% in the second half of 1982 to a low of 33% in the first half of 1984. The primary reason for this decrease is the steady increase from 21% to 62% in the cases that do not go to trial. The majority of this increase is the result of increased diversions. Roughly half of all cases in Wichita are currently diverted from trial, and this may represent a weakening of the sanctions for DWI; however, the alcohol offense is retained on the driver record even in the case of diversion; See Table 1.

When examining only those cases that are tried, the conviction rate has increased from 77% in the six months preceding the TOP to 95% in the most recent six month period. The conviction rate exceeds the 80% objective, it represents a dramatic improvement and substantial success in meeting the goal.

One gap in treatment that has recently been addressed is the addition of a weekend treatment program. Beginning in February 1984 the Wichita Municipal Court began its Weekend Intervention Program (WIP) to provide limited client evaluations and information on alcohol and traffic safety problems to offenders during their weekend confinement. The program is conducted at Wesley Hospital in place of County jail and is paid for by the offender.

TABLE 1. CHANGES IN COURT LOAD AND CASE HANDLING

	July- Dec. 1982	Jan.- June 1983	July- Dec. 1983	Jan.- June 1984
Before Trial:	Column Percent			
Dismissed by Prosecutor	21	12	9	22
Diversion	0	31	59	43
After Trial:				
Not Guilty	18	9	3	2
Guilty (this includes appeals)	<u>61</u>	<u>48</u>	<u>29</u>	<u>33</u>
Total (number)	100% (100)	100% (169)	100% (719)	100% (1206)

Self-Sufficiency

Wichita has had considerable success in shifting the costs of alcohol programs to those arrested for DWI and under treatment for alcohol and drug abuse. The Wichita effort to increase financial self-sufficiency has had four major components. First, a general tax of 10% was levied on all alcoholic drinks sold in private clubs (the equivalent of bars and restaurants in most States) with 25% of the revenues reserved for community alcohol treatment programs. This tax raised \$660,000 for alcohol and drug treatment programs in Wichita. Second, the fines for DWI convictions have been increased and the judges have become more uniform in their assessment. Third, the court now charges \$85 to defray the costs of conducting a pre-sentence investigation. Fourth, to the extent individuals can pay for services, all treatment programs are assessed against the offender.

Citizen Support

When the Wichita program was first considered in 1982 no citizen activist groups existed locally, and increased public support became a major focus. After the first year of the TOP, local chapters of two national citizen advocacy groups -- Remove Intoxicated Drivers (RID) and Students Against Drunk Driving (SADD) -- were established in Wichita. This is in addition to the community task force established to improve planning and to oversee the programs. Although additional citizens' groups and a continued broadening of public support are necessary to sustain the efforts to reduce drunk driving, the Wichita TOP has made substantial gains in implementing this component of the comprehensive model.

Prevention

The Wichita Public School System is the largest district in the State of Kansas, with an enrollment of approximately 45,000 pupils. Prior to the TOP there was little coordinated effort to teach those of school age about the dangers of drunk driving. With the TOP, programs for kindergarten through 12th grade in the areas of drug and alcohol abuse and in traffic safety have been established. Of special note is the School Team approach which emphasizes training methods to personalize the curriculum guide philosophy and activities to each school's staff and community. Methods of school and community problem solving, decision making, and safety are stressed in the team training. These programs are funded in part by the Wichita public schools.

Pre- and Post tests of knowledge about drug and alcohol abuse have shown a 26% gain among elementary school students. More significant is the decline in school year absences, as much as 80%, in some of those high schools that had a high level of drug and alcohol training. Actively participating elementary and junior high schools also showed less dramatic declines in absences; they experienced approximately 10% declines. Other performance factors include significant reductions in substance abuse suspensions in school team schools and the district as a whole. Team schools demonstrated a 15% decrease in smoking violations, a 37% decrease in alcohol violations; and a 22% decrease in drug violations.

Evaluation

An impact evaluation was conducted for Wichita using the ratio of Wichita's crash experience to the State of Kansas as a whole for the period of January 1978 through March 1984, a 75 month time period. Multiple vehicle night fatalities and injuries decreased 51.8% during the target period of operations as compared to the baseline period. Multiple vehicle day fatalities and injuries decreased 35.5% during the Target period of operations as compared to the baseline period. Using the day

fatality and injury data as a measure of external factors such as economic recession, changes in driving habits, etc., it is estimated that the net decrease of 16.3% in nighttime fatalities and injuries is attributable to the impact brought about by the activity of the Target of Opportunity program.

Attitudinal surveys were conducted in December 1982 and again in June 1984. In the first survey, 43% judged the risk of arrest to be low. In the second survey, this was reduced to 32% suggesting that the increase in arrests and media attention may have had a positive effect. In addition, a significantly higher percent of the respondents in the second survey agreed that arresting drunk drivers should be a high priority on the part of the police (61% versus 52%).

General Observations

The comprehensive program for reducing drunk driving has been successfully implemented and there is preliminary evidence that this program has reduced the amount of drunk driving and influenced public attitudes associated with the risks of DWI. The Wichita Target has shown dramatic progress towards meeting its objectives. Indeed, the TOP has pushed to the limit the ability of the police, prosecutors, and courts to handle DWI cases.

Even though, the comprehensive program has been successfully implemented and has had measurable impact, several problems with the overall approach remain. First the model is multi-faceted and depends on the cooperation of many different social agencies. It also depends on the assistance of the broadcast and print media.

As the program expands, coordination and implementation become increasingly difficult due to the limited resources available. The model calls for self-sufficiency, which is perhaps the best way to sustain the effort for a lengthy period of time.

Second, the relative success of Wichita's implementation and the intransigence of the problem may indicate some flaws in the general deterrence model. The focus of the general deterrence model - changing the attitudes and actions of the general public - may not address the cause of most drunk driving accidents. Further experience with the Targets of Opportunity will show the extent to which a community can expect to reduce the incidence of drinking and driving through use of the model. It may also reveal additional program components which will further increase the success of local efforts.

SPOKANE COUNTY, WASHINGTON

The Spokane County, Washington Target of Opportunity is unique in its approach toward reducing alcohol related traffic crashes, deaths, and injuries. It consists of a grass-roots citizens' group known as Citizens Against Alcohol Related Traffic Accidents (CARTA). The philosophy of the CARTA approach is that informed and concerned citizens will pressure the jurisdiction's officials to develop a comprehensive alcohol safety program. It is unique in that it applies pressure from the "bottom up and from within" versus the traditional "top down" approach. CARTA believes that if their objectives are achieved, the program developed will have a longer lasting effect as compared to programs initiated and funded with Federal funds (Section 402 and 403 projects).

Planning of most activities occurred in 1981. Goals established were: (1) Form a citizen-based committee to identify and work on the drinking driver problem in Spokane County, (2) Identify whether the community feels a drinking driver problem exists in the County by means of a public opinion survey, (3) Develop interaction between the citizens committee and the general public regarding the drinking driver, and (4) Design a workable countermeasure program acceptable to the general public.

General Deterrence

There are no special DWI patrols in the Spokane County area. However, as the following table demonstrates, arrests by the city and county police have doubled.

SPOKANE COUNTY AND CITY ARRESTS: 1980-84

Average Number of DWI Arrests Per Month	1980	1981	1982	1983	1984*
Spokane County Sheriff's Office	12.1	11.5	15.3	26.8	19.2
% Change from Previous Year		-5.0%	+33.0%	+75.2%	-28.4%
Spokane City Police Department	26.1	24.4	31.8	45.2	47.3
% Change from Previous Year		-6.5	+30.3%	+42.1%	+4.6%

*First six months

CARTA has sponsored a drinking and driving demonstration entitled the O-POINT-ONE Rally. The purpose of the rally was to demonstrate the deteriorating effects that alcohol has on mental and physical abilities, especially as they relate to drinking and driving performance. Twelve citizens participated in the six event course designed. Media coverage was excellent with PM Magazine filming a special segment which aired in July. A video tape of the rally was made which was utilized in schools and community groups to educate other drivers on the potential danger in drinking and driving.

CARTA developed a Master Plan for its operation. Initial planning began in January 1982. Priorities selected included the target areas of judicial, law enforcement, prosecution, legislation, and public information. It was CARTA's intent to attack each of its priorities one-by-one; however, public information was a continuing effort.

Community Focus/Systems Approach

In the case of Spokane, the community focus or the grass roots approach is the foundation of the system. In May of 1984, a task force was established to improve communications between components of the DWI legal system. On June 18-20, an Alcohol Countermeasure Program Coordinators' Workshop was conducted. It involved participants from 15 different countermeasure sites throughout the State. Areas emphasized were the recruitment and motivation of "volunteers," establishing realistic objectives, utilization of community resources, and a successful effort to establish a mutually supportive and interactive formal organization of program coordinators.

A new group was established to work on the critical problem of "Improving Communications between Components of the DWI Legal System." Thirty-seven representatives for various component agencies (law enforcement, judiciary, prosecution, rehabilitation, licensing, court administration, and defense attorneys) met to discuss the problems which prevented efficient and effective processing of the DWI offender and to offer suggestions on remedying communication gaps. From the content of the discussion, it was obvious that this was the first time that the various component agencies and individuals had ever met jointly to discuss system shortcomings that compromised the operation of this complex system. Subsequent meetings are scheduled.

Self-Sufficiency

Although there is no formal self-sufficiency program, CARTA has made some inroads in this area through its advocacy efforts. Partly because of public demand, the legislature provided in the last session \$3 million which will significantly help the prosecution and probation departments.

Citizen Support

The CARTA approach is to impact the DWI problem by utilizing peer influence through public information and education and involvement of local citizenry. This "grass roots" approach is unique and differs dramatically from the traditional comprehensive alcohol program approach. When CARTA started, it solicited citizen membership from such groups as the insurance and alcohol industry, education, military, legal, real-estate, transportation, treatment, pharmacy, advertising, banks, service clubs, AAA, and MADD. Public and key agency officials were excluded since the project was purposefully planned to be a citizen's committee. One example of citizen activity is demonstrated by CARTA's involvement with the courts as outlined below.

Prevention

In Spokane County, it was noted that 15-24 year olds comprise 20% of drivers but are involved in 41% of the alcohol related crashes. As a result, a Youth Task Force was created by students and adult CARTA members interested in getting young people to develop their own countermeasures to stop DWI. In 1982, the Youth Task Force undertook two projects. One was "Drive Alive: A Creative Media Contest." Eighty young people submitted entries. The other project was the showing of "Friday Night Live" where parents were invited to attend.

A manual review of the Spokane Municipal Court dockets and case files for the years 1980 through 1983 has been completed by volunteers from CARTA. One thousand, four hundred and fifteen DWI cases were identified and information on fines, jail sentences, and other sanctions were extracted. A tabulation of this data for each of the Municipal Court judges vividly illustrated the variance in sentencing practices followed by the individual judges and served as the basis upon which visits to each judge were made to discuss the findings and to seek remedies to improve uniformity among the judges. A similar audit of Spokane District Court DWI dispositions is currently underway and was scheduled for completion in September 1984.

Evaluation

In July 1981, the first telephone public opinion poll of 200 respondents was conducted and covered four general areas: perception of the drinking driver, knowledge level of alcohol use and DWI laws, involvement with the drinking driver, and methods to reduce alcohol related traffic crashes. A summary of results indicated that (1) 74% of those surveyed drink alcohol and 55.2% drive after drinking, (2) 91% know when they are too drunk to drive, (3) people who drink seem to have a better knowledge of the law while non-drinkers know more about the effects of alcohol on the body, (4) 50% felt that drunk drivers are a major cause of traffic

crashes and 71.5% felt the drinking driver was a major community problem about which something should be done, (5) drinkers felt a preventive countermeasure program would be more effective while non-drinkers favored punitive measures, and (6) everyone needed to work on the problem - citizens, government, and professional agencies - to reduce traffic crashes. A two-year follow-up to CARTA's 1981 public opinion survey was completed by November 30, 1983. The results indicated that fewer people drive after drinking -- 32.2% in this study compared to 54.5% in the 1981 study. Eighty-nine percent of those surveyed felt there is a drinking driver problem in Spokane County, compared to 71.5% in 1981. Seventy-three percent said legislators should pass even stricter drunk driving laws. More people (87.4%) agreed that DWI should be considered a criminal act than in 1981 (79%) and knowledge about drinking and driving had increased.

Spokane County's monthly fatal and serious injury alcohol related accidents were analyzed to determine if there had been a reduction during the period January 1982 through December 1983. The analysis showed a reduction of 16 alcohol related accidents per month which resulted in a 28% reduction compared to the previous period. Additionally a similar analysis of weekend nighttime accidents revealed a monthly reduction of 13 accidents for the period January 1982 through March 1983. When compared to a baseline period, a reduction of 13.8% weekend night accidents was experienced.

Statewide fatal and injury alcohol related accidents were analyzed as a comparison for Spokane County. The analysis reveals a 25% reduction statewide for fatal and injury alcohol related accidents for the period January 1982 through December 1984; therefore, one cannot conclude that CARTA has had a dramatic impact on reducing alcohol related crashes.

The bottom line is that alcohol related traffic crashes in Spokane County decreased 11% in 1982 from 1981. Fatalities were reduced 13%, injuries 8% and Property Damage Only (PDO) accidents 12%. Crashes caused by under 25-year-olds decreased 10%, fatalities 40%, injuries 11% and PDO accidents 20%.

CARTA has made an impact. The community has become more aware of the DWI problem, and there are indications that individuals are moderating their lifestyles by not driving while drunk.

General Observations

It appears that CARTA is making progress in meeting its objectives. Citizens are more aware of the problem created by drinking drivers and various components of the system are actively working within the Spokane County DWI Task Force to resolve problems.

SALT LAKE COUNTY, UTAH

The Utah Highway Safety Program Office began discussions with NHTSA in July of 1982, and agreed to pursue the project concept.

Salt Lake County was chosen as the target site because of its drunk driving problems and past record of cooperation. In August, the Utah Chiefs of Police Association was informed of the project and support was solicited from target chiefs at that time. During October of 1982, all target participants were invited to attend the Traffic Safety Institute's Alcohol Program Management Course. Approximately 40 people attended. In November, representatives from all involved target communities met together, and were informed of baseline and other evaluation data required for the "Target Plan." At this same time, commitments and future planning sessions were discussed. At the January 28th meeting, representatives from eight jurisdictions in Salt Lake County were in attendance. The communities were Salt Lake City, Salt Lake County, South Salt Lake, West Valley, Murray, Midvale, Sandy, and West Jordan. Several smaller police agencies did not participate. Treatment people were included but could not speak for anyone but Salt Lake County.

During the January meeting, each jurisdiction chose a chairman, and began outlining specific DUI countermeasures for inclusion in the Target Plan. Each city had representatives from the enforcement, prosecution and judicial agencies.

With the eight Target communities selected and working, a kick off event and announcement were scheduled for April 1, 1983. During the months leading up to the kick off, task force groups and Highway Safety staffers prepared a proposed two year Target Plan. Original plans called for the "Target" start up in January 1983, but because of delays in establishing task forces the operational date was moved to April 1983.

In April 1982, Governor Scott M. Matheson appointed a commission on drunk driving. Eighteen people from the public and private sector were charged with the responsibility of reviewing in detail all laws, programs and efforts impacting the drinking driver. Also the commission was to make recommendations for improvements to all levels of government related to the statutory and administrative systems involved with drinking drivers.

The commission was successful in suggesting and influencing legislation changing drunk driving laws and providing new funds for anti-drunk driving programs. A major success of the commission was the passage of

a new Administrative Per Se law. Also, an additional beer tax increase passed the legislature adding \$750,000 to the Salt Lake Target for self-sufficiency.

General Deterrence, Community Focus and Systems Approach

Since the individual Target communities emphasized different components and instituted varied countermeasures, the elements of general deterrence and systems approach are treated together addressing each community separately.

A large amount of public information activity, both public and private, has been generated during the first year of operations. Several State and local agencies have also been involved in public information programs which enhance the perception of risk for drinking drivers. Much of this public information centered around the new legislation which introduced .08 illegal per se, administrative per se and new tax legislation on beer barrellage. Additional information in a number of media presentations has been presented which specifically address the increased risk of arrest for DUI. During the first year of operations, sobriety checkpoints were conducted in several cities, but especially West Valley City. The major weaknesses in general deterrence are that no other elements of the drunk driver control system have made media events of controlling the drunk driver through prosecution, adjudication, and sanctioning. Furthermore, the enforcement levels achieved during the first year of operations have not been sufficient to create a perception of risk. Total DUI arrests increased from 3,486 to 3,942. However, most police department totals were relatively stable while one decreased and one other increased from 56 to 251. Other police departments such as West Valley City and Midvale were considered to be at their peak when the Target started.

1. Salt Lake County - The Sheriff's Office has increased their DUI arrests by dedicating officers for DUI patrols. They started late in 1983, but should show consistent increases during the target period.

Salt Lake County prosecutors have developed a county wide pre-screening and case settlement policy. In addition, county law enforcement officers, prosecutors, judges and treatment personnel have attended training sessions provided for their specialties.

2. Salt Lake City - The Police Department has implemented a comprehensive tracking system which monitors the DUI's going through the criminal justice system. They use the system to

improve officer training, to keep judges informed on disposition information and to serve outstanding warrants to offenders who fail to appear in court.

The police also participated in distributing several thousand pamphlets on DUI public information. Many of their officers attended DUI training on detection and arrest procedures. Several prosecutors and city judges attended DUI training courses. A Salt Lake City judge was instrumental in getting donated space for 200 billboards with anti-drunk driving messages.

3. West Valley City - The Police Department has had a very effective DUI roadblock program. Almost weekly during the non-winter months, sobriety checkpoints were initiated. The police have been very active in DUI training programs and developing a tracking system. They have also consistently increased arrests.
4. West Jordan City - West Jordan Police have also been very active in implementing roadblocks, holding two a month through the summer. They obtained a breathalyzer to speed up DUI processing and have been involved in training. Their judge coordinates the community task force, and meets every other month with police, prosecutors, and city council members. They have made a conscientious effort to standardize DUI policy in the city.
5. Midvale City - The Police Department has enthusiastically pursued drunk driving arrests, increasing overall totals. They obtained an intoxilyzer to improve testing capabilities. The prosecutor has encouraged a tough policy for DUI's and has pre-trial conferences with arresting officers regularly. The judge has been very firm about sentencing. This group's communication has benefited by working as a task force.
6. Murray City - The Police Department has increased DUI arrests by 300%. Their task force encouraged the city council to approve a dedicated DUI patrol which is responsible for the arrest increases. They also purchased an intoxilyzer to improve testing procedures.

The prosecution has been very active in assisting police officers in establishing procedures for DUI case preparation. Prosecution has been very involved in training and legislative reforms. The task force meets regularly to discuss progress. They have been very interested in finding a good community service alternative to jail and are discussing it further.

7. South Salt Lake - The Police Department has always maintained DUI enforcement as high priority. Nevertheless, they have increased their arrests and attended all training activities.

The prosecutor now meets regularly with police officers to prepare DUI cases. The task force has been very influential in getting the judge to send convicted DUI's to treatment and education courses. Their judge rarely utilized treatment services in the past.

Self-Sufficiency

The State beer tax increase supports two funds: one to provide \$2 million annually for education and prevention programs and another to provide \$4.5 million annually to cities, counties, and towns to conduct additional programs in drunk driver control. The first portion is controlled by the State Division of Alcohol and Drug Abuse which has program responsibility for the funds.

Citizen Support

The only major citizen activist group in the Salt Lake Valley has been Parents Against Drunk Driving (PADD). Citizen support has always been positive, but has never established a permanent constituency or organization.

Prevention

The State Division of Alcohol and Drug Abuse has developed a controlled and monitored way for expenditure of the \$2 million it receives in beer tax revenue. It has placed a modified version of the Prevention X Three curriculum into all school systems in Salt Lake County and most school systems in the State. They have trained teachers and provided materials to implement the program. At least thirty intervention and prevention projects are operating in Salt Lake County through a variety of organizations. A prevention coordinator has been funded and thirteen prevention task forces have been established in the County. In addition, a number of town meetings on the alcohol and drug abuse problem have been held. Also, a "Governor's Youth Advisory Committee on Alcohol and Drugs" has been established and is providing policy for the Division of Alcoholism and Drugs. These students meet twice a year to make recommendations to the Governor and have been involved in project graduation parties. Finally, Salt Lake County has established a subcommittee on youth and drugged driving. This committee makes recommendations on possible legislation and other drugged driving issues. The major task in prevention is to link the organizations and operational activities of the short-term agencies such as enforcement, prosecution, etc. with the long-term prevention efforts. In summary, prevention activities in Salt Lake County appear to be excellent.

Evaluation

A number of impact measures have been evaluated by time series analysis for the period of January 1981 through March 1984 focusing on the period of April 1983 through March 1984 as the intervention period. Comparison series were also analyzed for establishment of external validity.

IMPACT ANALYSIS APRIL 1983 - MARCH 1984

<u>Impact Measure</u>	<u>Annual Reduction</u>	<u>Percent Reduction</u>
Night Fatalities	15	34.9
Day Fatalities	Not Statistically Significant	
Night Alcohol Related Fatalities	13	38.2
Difference Between Night Alcohol/Related Fatalities and Total Fatalities	Not Statistically Significant	
Alcohol Related Fatalities	27	35.7
All Other Fatalities	Not Statistically Significant	

The above pairs of impact measures clearly indicate that significant reductions occurred in the alcohol surrogates but not in the comparison measures.

General Observations

The Salt Lake County Target consists of ten cities which comprise the emphasis area for implementing the comprehensive alcohol community based general deterrence program. The large number of communities makes it difficult in terms of trying to integrate one overall program. The separate jurisdictions, each with its own drunk driver control system, at various levels of implementation, create operational problems that would not exist if only one jurisdiction were involved. Coordination problems, establishment of separate viable task forces, and lack of available uniform data tend to increase the problems as the number of separate jurisdictions within a Target area grow. Although arrests did not increase dramatically, there was a great deal of public information generated by the Governor's Task Force and subsequent legislation.

The comprehensive community based program appears to have worked in the Salt Lake County Target. It would have been more effective had it been

applied to one jurisdiction. The concept was implemented effectively in three rural communities. In Utah, the success of selling the task force concept to local political subdivisions seems to depend on the political strength of the lead individual whose responsibility it is to establish the task force. The individual assigned should have the political power to make the concept work. From Utah's experience, it appears that the concept is far more successful in the rural counties than large metropolitan areas because of the reduced number of agencies to be coordinated. Again the ten separate entities existing in the Salt Lake County area required a two tier level of coordination; one for the community and a second for the Target itself. It would be Utah's recommendation that there be funds available for paid local coordination and that the members appointed to task forces should be the policy makers with a minimum amount of delegation to non-policy makers.

ILLINOIS

Illinois was selected as one of the ten Targets of Opportunity in September 1982. The Illinois Department of Transportation (IDOT) had assessed the magnitude of the drunk driver problem in many of the State's communities. As a result, the Comprehensive Alcohol Safety Program (CASP) was implemented in seven (7) cities and four (4) counties identified with a greater than average problem of alcohol involved accidents. Two of the CASP communities, Springfield and Waukegan, were chosen as the focus of the Illinois TOP evaluation. The Springfield CASP became operational in January 1983. The Waukegan CASP became operational in March 1983.

General Deterrence

Enforcement

The CASPs are required to patrol designated areas a minimum of 30 hours a week. The patrols are focused at identified high alcohol related accident areas.

Sobriety checkpoints have been used extensively throughout the State, with the most productive one in operation during June 29-30, 1984. This roadside safety check was held using approximately 220 officers making over 2200 contacts, for a contact rate of 10 per officer. The result was a total of 764 traffic arrests and 1,126 written warnings. Of the arrests, approximately 70% were for alcohol related violations.

The Springfield Police operated a rotational patrol in four quadrants of the city. The States' Attorney began holding night court to expedite processing of DWI cases. Two Springfield Police officers were trained in the Horizontal Gaze Nystagmus course for instructors. They have now begun to train their fellow officers.

Springfield's Enforcement activity compared favorably to the operational goals. Police made an average of one contact every 63 minutes and one DUI arrest for every 2.7 patrol hours. DUI processing averaged less than 1.5 hours per arrest. These accomplishments in improving DUI enforcement operations were made while expending only half of the planned patrol hours per week. Table 1 shows these results compared with operational goals.

The Waukegan Police focused DUI patrol on six major highway arteries. Enforcement activity resulted in an average of one contact every 80 minutes and one DUI arrest for every 8.2 patrol hours. DUI processing time averaged less than 1.5 hours per arrest.

Public Information and Education

The CASP sites are required to have some media contact at least once a month. This activity consists of local newspaper articles, billboards, posters, etc. A PI&E workshop was held August 28-29, 1984. CASP representatives attended the workshop.

A Project Graduation conference was held at the Illinois St. Police Training Academy, March 23-25, 1984. The conference was supported and attended by the Secretary of State, in addition to other State officials.

Community Focus/Systems Approach

The CASP configuration is much like NHTSA's six point concept for the TOPs. The CASP utilizes a comprehensive approach to attack each community's drinking driver problem. Public and private agencies responsible for Driving Under the Influence (DUI) enforcement, adjudication, treatment, and public information/education are involved in planning CASP activities. Each CASP has, in addition to local police support and involvement, a Records Clerk, a dedicated Prosecutor, and a Public Information Officer.

Self-Sufficiency

Fines generated via DWI arrest and prosecution generally stay in the county; however, a procedure to ensure financial self-sufficiency has not yet been implemented. The interim report of the DUI Task Force has recommended a three tier approach to funding DUI programs in Illinois.

Citizen Support

The CASP communities are encouraged to stimulate citizen activity and interest. Representatives from all CASPs have attended NHTSA's Alcohol Program Management Seminar. Considerable activity has also taken place at the State level. Citizen activist groups, e.g., Alliance Against Intoxicated Motorists (AAIM), Remove Intoxicated Drivers (RID), Hands Across the Border (HAB) and Students Against Drunk Driving (SADD) have been active in generating support and media attention. Governor Thompson established a DUI Task Force in December 1983, appointing 31 members. The Task Force, chaired by Secretary of State Edgar, consists of four subcommittees. The subcommittees are studying the areas of funding and administrative activity; enforcement and adjudication; community action, public information and education; and rehabilitation and treatment. There has been some private sector involvement, especially from the Kemper and Allstate Insurance Companies.

Prevention

CASP prevention activities are directed by the Public Information Officer and rely upon community involvement throughout the State. Emphasis has been on Project Graduation, the concept of chemical-free graduation parties. The Illinois State Police helped organize and support a national conference on Project Graduation in March 1984. The CASP sites have established traffic safety programs in the high schools. These programs address alcohol issues in addition to other traffic safety problems.

Evaluation

Data for Springfield's first year of operations (January 1983 - December 1983) demonstrated that most operational goals were met. A 22% decrease in accidents occurred in the patrolled areas. Accidents in the remainder of the city decreased 8% (see Table 1).

The Springfield dedicated DUI patrol generated 28% of the city's total DUI arrests. BAC test results were available in 75% of the dedicated DUI arrests. Also, the dedicated DUI patrol operated very efficiently with a contact rate of once every 36 minutes, an average DUI processing time of 1.4 hours per arrest, and an arrest rate of one DUI arrest every 1.7 hours.

Preliminary prosecution/adjudication data indicate that the average BAC/DUI conviction ranges from 0.16 to 0.24. The average BAC has remained high in part due to hesitation to arrest suspects with a low BAC, i.e. 0.10 - 0.11, and inexperience in detecting offenders with lower BACs. This may be alleviated with an increase in officers using the Horizontal Gaze Nystagmus Test. The number of dismissals and acquittals remains very low. Average time from arrest to disposition is decreasing, and an increasing number of convicted DUIs are sent to jail. The Springfield CASP is being continued by Illinois DOT for a second year of operations.

The first year of operations for Waukegan have shown accidents decreasing 20% in the patrolled areas and 43% elsewhere in the city. Enforcement activity was at an average of 206 hours per week. Police made an average of one contact every 80 minutes, and one DUI arrest every 8.2 patrol hours. Table 2 shows these results.

General Observations

The Illinois TOP has been successful in the enforcement component. Requirements for a comprehensive approach to attack a community's drinking driver problem are established for each CASP at the State level. Program funding and activities for the Springfield and Waukegan CASPs, however, has been enforcement oriented. This is reflected by the success of the enforcement effort.

TABLE 1

**SPRINGFIELD, ILLINOIS TARGET OF OPPORTUNITY
FIRST YEAR OF OPERATIONS**

<u>Measure</u>	<u>Actual Results</u>	<u>Operational Goal</u>
Patrol Area Accidents	-22%	-10%
Non-Patrol Area Accidents	-8%	-10%
Contact Rate	1/63 Minutes	1/70 Minutes
DUI Arrest Rate	1/2.6 Patrol Hours	1/6.0 Patrol Hours
No. Patrol Hours per Week	17 Hours	32 Hours

TABLE 2

**WAUKEGAN, ILLINOIS TARGET OF OPPORTUNITY
FIRST YEAR OF OPERATIONS**

<u>Measure</u>	<u>Actual Results</u>	<u>Operation Goal</u>
Patrol Area Accidents	-20%	-15%
Non-Patrol Area Accidents	-43%	-15%
Contact Rate	1/80 Minutes	1/70 Minutes
DUI Arrest Rate	1/8.2 Patrol Hours	1/6.0 Patrol Hours
No. Patrol Hours per Week	206 Hours	147 Hours

The Governor's DUI Task Force has been in operation since December 1983. Four subcommittees were formed: Funding and Administration; Community Action, Public Information and Education; Alcohol Remediation and Treatment; and Enforcement and Adjudication. The Task Force conducted seven hearings throughout the State. An interim report was submitted to the Governor in December 1984. There were 59 recommendations, with the major ones being:

- ** An administrative license suspension policy permitting the immediate suspension of driving privileges of persons arrested for DUI;
- ** A "Penny-A-Drink" tax to generate revenue for State and local DUI programs;
- ** Legislation banning the sale of alcohol in establishments that sell gasoline;
- ** Education programs on alcohol and drug abuse and highway safety in kindergarten through 12th grade;
- ** Increased emphasis on programs for the victims of DUI accidents;
- ** Legislation increasing the Dram Shop liability from the current \$20,000 limitation to a limitation of \$100,000 per individual and \$300,000 per incident;
- ** The issuance of a distinctive drivers license to persons under the legal drinking age.

The Governor's DUI Task Force may provide the catalyst to promote growth in other system components. At the local level, this catalyst will help the communities to focus on enhancing activities in prosecution/adjudication; rehabilitation/treatment, public information/education, and management information systems. The Task Force recommendations will undoubtedly create the climate for program success in all system areas.

NASSAU COUNTY, NEW YORK

Nassau County, one of the Alcohol Safety Action Projects (ASAPs) in the 1970s, became operational as a Target of Opportunity in January, 1983. The County was chosen as a Target since the foundation of a comprehensive alcohol program had been established with New York State's STOP-DWI program. STOP-DWI had been in operation since December 1981, therefore the County was well on its way in dealing with the drunk driving problem.

Alcohol related crashes had been a critical problem in Nassau County. Approximately 50% of the 1980 fatality total in the county, 76 out of 163, were identified as alcohol related. In fact, alcohol related crashes increased from 1,047 to 1,099 between 1974 and 1980. In addition, approximately 50% of the 2,200 DWI arrests during 1980 in Nassau County also involved crashes.

The persistence of the drunk driving problem in Nassau County could be attributed to several factors. There was a lack of public awareness concerning the seriousness of the drinking/driving problem. Socially, drinking and driving was generally accepted and tolerated in the community. The perception of the risk of DWI arrest was low. The relatively minor penalties being imposed for DWI offenses did not deter the public. In addition, the decreasing County budget and demand on the budget for other priorities limited the availability of monies for a drunk driving program.

General Deterrence

Enforcement

Enforcement efforts centered around a six (6) officer Special Enforcement Team (SET). The concentrated efforts resulted in a 30% increase in DWI arrests. Cooperation was obtained from the 23 Village Police agencies and the State Police. The result has been a comprehensive enforcement approach to the drunk driving problem in Nassau County. Forty officers have been trained in Horizontal Eye Gaze Nystagmus and Improved Sobriety Testing which undoubtedly contributed to the 26% increase in the conviction rate.

Public Information and Education

A county attitude survey was completed in 1983, revealing that 79% of those surveyed were aware of the new N.Y. DWI laws and 99% felt that drunk driving is a serious problem. Private sector involvement in PI&E activities has been strong. Five thousand (5,000) key chains with the STOP-DWI logo were distributed by the 7-11 Stores, and numerous other businesses have cooperated in using the logo and other materials. Training has been made available in a number of areas, e.g., a Dram Shop Liability Seminar was held in November 1983 for fifty (50) alcohol servers.

Community Focus/Systems Approach

Nassau County was the first county to receive STOP-DWI plan approval. The original 1983 budget of \$1,222,270 was allocated as follows: Enforcement - \$527,876; Prosecution - \$111,000; Probation - \$200,177; Public Information/Education - \$41,708; Rehabilitation - \$214,164; Program Administration - \$127,345. The Nassau County STOP-DWI Coordinator worked effectively to gain commitments and cooperation from all involved County agencies. In addition, the coordinator established a working relationship with neighboring counties to institutionalize a regional approach to the DWI problem.

Self-Sufficiency

At the State level, the drunk driving problem was addressed by passage of the Special Traffic Options Program for Driving While Intoxicated (STOP-DWI) on November 28, 1981. This legislation implemented returning DWI fines to the County in which the offense occurred. To participate, each county prepared a STOP-DWI plan that detailed how the fine revenue would be spent to combat the drunk driving problem. Each county plan required approval by the New York Commissioner of Motor Vehicles.

Citizen Support

Citizen activity has consisted of RID and MADD involvement. There are SADD chapters in each of the 57 Nassau County area high schools.

Prevention

Education activities are handled by representatives from the Public Information Bureaus of the Nassau County Executive's Office and the Nassau County Police Department. The coordinator is also assisted by a representative from the Traffic Safety Board.

Education materials emphasize alternatives to DWI and focus on two target groups: drivers aged 16-24 years and youth aged 5-15 years. The AAA's "Starting Early" curriculum has been pilot tested in county grade schools (K-6).

Garden City, one of the larger cities in the county, has a "Safety-Rama" program for grades K-2. A K-12 program is also in place in 68 public, private and parochial schools. The program focuses on messages regarding moderation in alcohol. Several private concerns have developed and made available materials with STOP-DWI message, e.g., book covers.

Nassau County also participates in the New York State Athletes Against Drunk Driving Program. It uses the Phil Esposito Foundation to address student groups on the concept of moderation in drinking.

Evaluation

Computer files of accident, arrest, and conviction data have been established for an impact evaluation. Accident data for the first two years of STOP-DWI program operations were compared to baseline data to determine if reductions have been realized since the program has been in place. Table 1 shows these results.

TABLE 1
NASSAU COUNTY TARGET
IMPACT EVALUATION SUMMARY

<u>Impact Measure</u>	<u>REDUCTION</u>	
	<u>NO.</u>	<u>%</u>
Total Fatal Accidents		
1st Program Year**	-10	-7%
2nd Program Year	-19	-13%
Night Fatal Accidents*		
1st Program Year	-6	-7%
2nd Program Year	-13	-15%
Total Personal Injury Accidents		
1st Program Year	-389	-2%
2nd Program Year	-197	-1%
Night Personal Injury Accidents*		
1st Program Year	-396	-6%
2nd Program Year	-667	-10%

* Night is 6 p.m. - 6 a.m.

** 1st Program Year is December 1981 - November 1982.

2nd Program Year is December 1982 - November 1983.

Target Operations began January 1983.

County specific files with data on administrative aspects of the program have been established. The Maintain, Prepare, and Produce Executive Reports (MAPPER) system was established to assist the administrative evaluation of the STOP-DWI program. Quarterly reports are also prepared by Nassau County and reported to the New York Department of Motor Vehicles.

General Observations

The Nassau County TOP has a designated program coordinator. This was a key factor in maintaining coordination at the project and State level.

The Nassau County TOP has already accomplished a great deal in combatting the drunk driving problem. The STOP-DWI program has obviously enhanced the ability of the county to do this. As a result, the county represents an excellent example of a comprehensive community alcohol program. The State's level of funding and commitment to the STOP-DWI program has undoubtedly created a climate for TOP success and accomplishment. The STOP-DWI program configuration is similar to that of the TOP. Goals have been identified and met in each of the six program components.

MIAMI-DADE COUNTY, FLORIDA

The Miami-Dade County, Florida TOP became operational in October 1983. In addition to meeting the selection criteria, the metropolitan Dade County area had been targeted by the Florida Bureau of Highway Safety (BHS) as one of the high alcohol involved accident locations in the State. Additionally, alcohol involvement in accidents was a focus in the State's Highway Safety planning process. As a result, Miami-Dade County received a 402 grant from the State of Florida in excess of \$1.5 million. Submissions from all agencies participating in the TOP were required by the State as part of the 402 grant approval process.

Numerous delays postponed the start of operations in the Miami-Dade County TOP until October 1983. Difficulties existed, such as turnover in project personnel, and a decision was made by the two major Police Departments involved, Miami and Dade County, to delay operations until areas of responsibility were determined. A public information and education program was slow in starting due to a delay in hiring a Public Information Officer. Support for an alcohol program was difficult to obtain in this multi-ethnic, multi-lingual, and multi-jurisdictional community since it was not viewed as a top priority by its citizenry.

General Deterrence

Enforcement

The Miami-Dade County TOP's first six months of operation, October 1983 - March 1984, has been productive in terms of DUI arrests. Twenty-two Metro-Dade and Miami Police officers comprise the dedicated DUI Task Force. The Task Force made 1,190 DUI arrests during the first six months which is an average of 54 DUI arrests per officer.

TABLE 1
DUI ARRESTS, DADE COUNTY
OCTOBER, 1983 - MARCH, 1984

<u>Enforcement Unit</u>	<u>No. Arrests</u>
TASK FORCE/DUI	
Miami	639
Metro-Dade	551
TOTAL	1,190
Non-TASK FORCE/DUI	
Miami	421
Metro-Dade	1,397
TOTAL	1,818

While Task Force DUI arrests are increasing and generating a considerable proportion of arrests, the overall level of arrests is down. This is due to the decrease in the arrests of non-Task Force officers. The Task Force enforcement generated 18% of the County's DUI arrests, a considerable amount in view of the number of officers involved.

Efficiency in DUI enforcement operations has not changed. Down time has remained at approximately 2 to 3 hours per DUI arrest. For Miami officers, the down time is a function of high processing time and the availability of only one alcohol test facility. This is offset in part by low transport distance to the test facility. Metro-Dade officers have access to more alcohol test facilities and low processing time, but high transport distances. Plans were made to acquire at least two Batmobiles to assist the Task Force officers in alcohol testing and processing and therefore reduce officer down time. Table 2 shows monthly Task Force officer down time.

TABLE 2
DUI TASK FORCE DOWN TIME
OCTOBER 1983 - MARCH 1984

	Hours/DUI Arrest						
	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>	<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>AVERAGE</u>
Miami	2.2	1.8	2.1	2.1	2.3	2.2	1.98
Metro-Dade	3.0	3.0	3.0	2.0	1.6	1.8	2.40

Average BAC per DUI arrest has fluctuated. From October, 1983 to March, 1984 the average BAC ranged from 0.104 to 0.130 for Metro-Dade Task Force arrests and from 0.140 to 0.185 for Miami Task Force officers. The lower BACs are believed to be indicative of a high level of drug involvement in accidents, a known problem in this area.

The Prosecution component, Dade County State Attorney's Office, focused on two major goals. The first goal was to increase the number of DUI cases handled from 7,737 to 11,500 (+49%) in the first year. For the first six months, 3,421 DUI cases were processed. If this rate remains constant, the goal will not be met. An influencing factor is that county-wide arrests are not increasing appreciably, even though Task Force arrests are substantial. The second goal was to increase the number of cases successfully prosecuted, i.e. the DUI conviction rate to be raised from 60% to 70%. For the period ending March, 1984 54% of DUI cases filed resulted in convictions, 44% were dismissed, and 2% were found not guilty. Contributing factors were a considerable proportion of low BAC readings (due to impairment from substances other than alcohol, i. e., drugs), and failure to appear by either the officer or alcohol test technician (often a problem with non-Task Force cases).

Public Information and Education

The public information effort while slow to start, has shown significant improvement. The level of public information and education activities increased during April-June 1984. Activities have included:

- establishment of local media contacts;
- a Public Information and Education conference;
- brochure and other materials development;
- press releases;
- Speakers Bureau establishment and appearances; and
- video/radio announcements distributed to local stations.

Community Focus/Systems Approach

The Miami-Dade County TOP is beginning to establish the components of a comprehensive alcohol program, i. e., the six point approach. General deterrence will be enhanced with the increase in PI&E activities. Plans are underway to establish a clearinghouse for information and to hire a bilingual PI&E Officer. The second year of TOP operations was announced with a kickoff program, involving media attention from the major TV stations in the area. It was attended by 200-300 people. The community focus is beginning to develop as a result of the stimulus by citizen groups. A Speakers Bureau assists in publicizing and informing the community. The systems approach is solidly in place, evidenced by the involvement and cooperation of staff from a wide range of public agencies.

The organizational configuration of the Miami-Dade County TOP is dependent upon a strong link between a number of State and local agencies. TOP activities are conducted under the umbrella of the Dade County Comprehensive Traffic Safety Program (CTSP), established as a result of agreements between the State and Dade County. The Dade County - Miami Criminal Justice Council is responsible for management, coordination, and evaluation of Target activities. Enforcement is coordinated by the City of Miami Police Department and the Metro-Dade Police Department, in conjunction with the Florida Highway Patrol and other jurisdictions in the county. Prosecution is handled by the Dade County States' Attorney; adjudication by Administration Office of the Courts; treatment/rehabilitation by DUI Countermeasures, Inc.

The Traffic Safety Ad-Hoc Committee, created by the CTSP to address the drunk driving issue, generally oversees the TOP program activities. The Committee has had success with obtaining the cooperation of the public agencies involved, in addition to generating private sector involvement.

Self-Sufficiency

Financial self-sufficiency will be addressed by the Ad-Hoc Committee. It is anticipated that at the current level of DUI arrests, over \$800,000 in DUI fines will be generated from the first year of operations.

Citizen Support

Citizen activity is being generated by organizations such as MADD, SADD, BACCHUS, the Citizen Safety Council, and Informed Families. The Project Graduation concept is being considered for the 1985 graduation season.

Prevention

Prevention activities have been concentrated on high school students. The TOP's PI&E staff have devoted considerable efforts to the Safe Graduation Program. The program targets high school seniors and other students to promote sober driving and safe transportation during the graduation season. The staff developed a "Contract for Life" allowing students to contract with an adult or older student for safe transportation in the event of alcohol and/or drug involvement. The card containing information on Florida's DUI laws has been distributed to approximately 10,000 students.

General Observations

The credibility, visibility, and community support/cooperation necessary for a comprehensive program to be successful have begun to materialize. Problems which remain are non-Task Force enforcement and prosecution/adjudication. Project management will continue to address and remedy these problems. Project management and on-site evaluation continue to be positive aspects of the TOP.

COCONINO AND YAVAPAI COUNTIES, ARIZONA

Coconino and Yavapai Counties in Arizona were selected as a Target of Opportunity to learn about and understand some of the problems inherent in establishing programs in remote areas where a drinking driving problem is rather acute. This is a region that encompasses 26,700 square miles of wind swept plateaus, mountains and canyons, yet contains fewer than 150,000 people. Roads are few in number and serve to connect the isolated communities of each county with the two cities of Flagstaff and Prescott. Both communities have been treated as one Target of Opportunity, although the Coconino project began in September 1983, and the Yavapai start date was December of the same year.

General Deterrence

Enforcement

In both Coconino and Yavapai Counties, the primary focus in the general deterrence area has been:

- a) Improved DUI enforcement training.
- b) Increase the public's perception concerning the risk of apprehension and the physical dangers of drinking and driving.

Advanced field sobriety testing and Horizontal Gaze Nystagmus are being taught to provide these techniques to all officers in each county. The DUI arrest rate increased by 7% in Yavapai County, but declined 27.6% in Coconino County; as a result of the rapid population growth of the community and its demand for police services other than DWI enforcement activities.

Public Information and Education

Media cooperation has been adequate to date in both Flagstaff and Prescott. Although no measure of perception will be taken at the midpoint of the program, it is clear from other indicators, such as attendance at public meetings, citizen activist groups, and the response to Department of Public Safety roadblock questionnaires, that the public awareness of drinking and driving hazards has increased. Further

evidence is to be found in the reduction of alcohol involved accidents. In June 1984, a PI&E workshop was held as part of NHTSA's training assistance.

Community Focus

To date, the role of the press and local radio and television has been to create a community focus which is starting to show signs of becoming a major force in both counties that will serve to maintain media interest as a reflection of genuine public concern.

Systems Approach

The existence of a target plan, with attendant goals and objectives, ensures the maintenance of a systems approach in each county. Coordination is maintained by the Advisory Board and the County Coordinator.

Self-Sufficiency

The target program operates on a \$50,000 budget with funds used for training and media programs. Enforcement and rehabilitation agencies are being asked to provide support without any significant financial assistance. When the program is completed, it will be incumbent upon the two counties to maintain a coordinating role, funded by local revenue, to continue with a systematic program of alcohol awareness.

Citizen Support

Citizen support in each county is growing as the attention focused upon the Statewide concern for alcohol combines with the existence of the local programs. In Coconino County, a local citizen action group, known as RAID (Rid Arizona of Intoxicated Drivers), and the Citizens' Against Substance Abuse have been working with the County Coordinator to encourage participation in open forums. In addition, coordination efforts have included the Navajo and Hopi meetings. Local school boards, the Ralston Purina Corporation, Peabody Coal and Southern Union Gas, have all shown an interest in programs for students/employees. In Yavapai County, the efforts of MADD, Yavapai College students and county school district personnel have been vital in the molding of citizen support. A Target "logo" contest drew interest from various sectors of the community during the Spring of 1984.

Prevention

A two day youth workshop was held in Coconino County oriented toward juvenile substance abuse.

"Sobriety Is Nice" (S.I.N.) organizations has been established among the Northern Arizona University students to raise University student and faculty awareness of the consequences of alcohol and other drug abuse and to collect and disseminate information on the subject of alcohol and other drugs. To date, a volley ball tournament and a "drink-in" have been held among the students to inform them of the seriousness of the alcohol problem. Future plans call for residential treatment counselor, education at the University Counseling Center and a hotline/rap center operation to counsel students on alcohol and other drug problems.

Evaluation

To date, the collection of data has proceeded on a monthly basis with varying degrees of cooperation from the local personnel involved. Most law enforcement agencies have responded. However, consistency in format took some time to develop. The Flagstaff Police Department, has experienced some difficulties in providing evaluation data because they do not have an automated system to replace hand tallying of the data. It will be several months before the backlog of Flagstaff Police Department accidents for 1984 is received and processed.

In Coconino County, during the January-April 1984 period, traffic accidents declined 23.9% from the prior four-month period. Alcohol involved accidents decreased 37.2%. Fatal accidents declined 50% with nine involving alcohol during the January-April period. It is apparent from the data available that during the second four-month period of the Target program, traffic accidents and those involving alcohol have declined. On initial examination, it appears that the target program has produced a strong degree of impact upon traffic accidents. Without the Flagstaff Police data, this assumption cannot be sustained. Drinking and driving in the city of Flagstaff accounts for a high percentage of the county's arrest and accident rates.

DUI arrests have declined 27.6% during the second four-month period when compared to the initial September-December 1983 period. This decline can be partially explained as a result of the enactment of a "tough" DUI law in late 1982 which has received continual publicity through the media, and the implementation by the Highway Patrol of a DUI roadblock program in late 1983 which has received additional media attention. As a result, fewer arrests are being seen statewide which can only reflect more restraint on the part of motorists when drinking. Statewide alcohol involved accident statistics have been declining since late 1982, a fact that makes this conclusion possible.

In Yavapai County during the January-April 1984 period, traffic accidents show a 25% decrease from the prior four months. Alcohol involved accidents, however, have only declined 4.8%. Fatal accidents declined 50% with none involving alcohol, though the initial four-months only experienced two fatal accidents. The downward trend in Yavapai County's traffic accidents is reflected in the Highway Patrol's county wide statistics for the January-April period which show a 6.1% decline in 1983 and a 7.6% increase in 1984. Alcohol involved accidents showed a 20.7% decline in 1983 but a 56.5% increase in 1984. Unlike Coconino County, all accident data is present for Yavapai County.

DUI arrests increased 7% during the 1984 four-month period over the last four months of 1983. This increase is in contrast to the apparent statewide trend which has shown declines since the inception of the new law in late 1982. Yavapai County communities are growing at a more rapid rate than those of Coconino County, an average 18% during the period 1980-1985. Traffic volume, increasing population and a major tourist attraction all combine to provide the potential for increasing DUI survey results arrests.

General Observations

In establishing a Target of Opportunity data collection program, numerous limiting factors became apparent. These are primarily related to data collection and include:

1. No statewide mandate for the dissemination of accident detail by individual jurisdiction. All historic or contemporary data must be hand copied as primary accident reports cannot be photo copied or removed from Department of Transportation archives.
2. No centralized source of DUI arrest data at the county or State level either for historic or contemporary arrest information.
3. Limited centralized historic DUI adjudication information exists.
4. No historic data relative to either license action, rehabilitation or recidivism can be obtained from any central data file.

In Arizona, statewide data collection relative to alcohol is limited to accident reports and the driver's license files, both sources being unavailable short of hand-tallies, beyond the resources of the Target of Opportunity evaluation contract.

Finally this project demonstrated that including more than one site in a single Target is difficult to design, coordinate and evaluate. Also, the target sites should be geographically smaller so that countermeasures can be more effectively applied.

BATON ROUGE, LOUISIANA

Baton Rouge, Louisiana was selected because the city met NHTSA's criteria, i.e., a jurisdiction with an on-going program in alcohol traffic safety that needed only some fine tuning. Since 1979, Baton Rouge was considered to have a comprehensive alcohol traffic safety program known as Checkmate. The program was supported by a \$1 million Section 402 grant from the Governor's Highway Safety Representative's Office. This comprehensive program combined police, prosecution, courts, probation, rehabilitation, and public information.

A combined Mayor's and President's Task Force on the Drunk Driver for East Baton Rouge Parish and the City of Baton Rouge was created. The Task Force was comprised of representatives from both government and concerned citizen sectors of the Greater Baton Rouge Community. In June 1984, a report of the Task Force's recommendations was submitted.

General Deterrence

Enforcement

A special DWI patrol operates in the City seven days a week, from 8 p.m. to 4 a.m. This patrol was funded by a \$200,000 grant from the State's \$2 million special DWI fund. The patrol uses specially equipped vans with sophisticated audio-visual recording equipment and computerized breath analyzing units.

Baton Rouge police officers have received special training in DWI enforcement. Fifty-one officers attended an 8-hour course in DWI Detection and Sobriety Testing. Eighteen police officers received training in a 16-hour Advanced Sobriety Testing Course, with one officer qualifying as a instructor for this course.

When a Section 402 grant ended in September 1982, some program components were continued with city government funds. Others were continued on a volunteer basis. Special DWI patrol activity decreased until the fall of 1983 when local revenue sharing funds were used to support the effort. In 1984, funds in the amount of \$200,000 were available from the State's \$2 million special DWI fund for continuation of the special DWI patrol. These funds are expected to support activities through early 1985.

Public Information and Education

During the Checkmate Program, \$20,000 was budgeted for the Public Information and Education component. The PI&E effort included radio and television public service announcements, newspaper spots, billboard advertisements, and literature materials. The newspaper publishes a list of those arrested each day.

A Public Information Officer/Coordinator was employed to coordinate and disseminate information. This position is located in the office of the Mayor and funded by Section 402 funds. A two day Drinking Driver Public Information Workshop was conducted in April 1984. As an outgrowth of the workshop, a Public Information/Education Plan was developed and is comprised of four general areas: general awareness, education, corporate, and a speakers' bureau.

Community Focus/Systems Approach

The program received strong cooperation from the court. The City Court was responsible for trying all first and second offenses for drunk driving and experienced a faster than average turnaround on most DWI cases. Forty to sixty days was the usual time between arrest and sentencing as compared to the Parish District Court which has taken up to two years to try a case after the initial arrest and charge. The City Court had posted a conviction rate above 90% for each year since 1979.

The City Court's Probation and Rehabilitation Unit was expanded in 1979 to include an extensive drunk driver screening process which complies with a 1983 City DWI ordinance. Included in the process is testing of individuals to determine the extent of their drinking problem, administration of a driver improvement school, and screening for possible community service work. The unit was also responsible for determining the best method of treatment for convicted DWIs.

Self-Sufficiency

From the fine and court cost of convicted DWIs, \$105 is diverted to support the probation department and provide for the alcohol education program. A recently completed economic impact report documents a dollar return of three to one in the community service program.

Citizen Support

A large (270 members), active MADD Chapter exists in Baton Rouge. One of its current efforts is monitoring the DWI cases in the District Court using a computerized system.

Prevention

Efforts are continuing to implement alcohol education materials in the school's curriculum.

Evaluation

During the first year of operations included:

DWI arrests for the period January 1, 1984, through July 1, 1984, in the City of Baton Rouge totaled 1,317 as compared to 730 for the same period the previous year. This represents an increase of 80% in DWI arrests. (Note: During this period the previous year, the special DWI patrol activities were decreased as a result of Section 402 funding termination).

DWI arrests in East Baton Rouge Parish also increased during this period from 435 to 519 and may be the result of enforcement training and increased awareness on the part of enforcement officers.

Fatalities in the city decreased from 19 to 16 for this period; however, injuries increased from 3,124 to 3,629, and accidents increased from 6,899 to 7,163.

The average BAC for DWI arrests is .161 for the city, and 89% of those arrested are determined by a BAC.

The percent convicted on the original charge is 91.4%, and the average conviction BAC is .162.

General Observations

Baton Rouge experienced a number of problems in the implementation of the target program. Delays were encountered because of the late appointment of a project director in November 1983. This resulted in a lack of coordination among the participating agencies. In addition, the development of a system description, operational plan, and evaluation plan was delayed. When Section 402 funding for the Checkmate Program ended in September 1982, there was no assurance that the special DWI patrols would continue. However, subsequent funding from other sources was available to continue the special patrols.

Although enforcement levels remained somewhat of a problem, the balance of the system is in place and operating in an exemplary fashion. The system components operating smoothly in Baton Rouge included prosecution, adjudication, probation, DWI schools, the referral process and license suspension.

DELAWARE

Delaware was designated a Target of Opportunity (TOP) and became operational on January 1983. A considerable amount of activity preceded the start of Target operations. The Delaware legislature passed legislation strengthening the penalties for DUI, such as provisions to deter those drivers who have not committed offenses, requirements that all DUI offenders attend an education or rehabilitation program and assessment of fines/fees such that it discourages repeat offenses and offsets the cost of the DUI control system. The Administrative Per Se provision meant that there would be a swift, certain sanction, i. e., the loss of license. Finally, Delaware raised in the legal drinking age to 21.

General Deterrence

Enforcement

Key enforcement goals were set for training, increased arrest rates, decreased time in DUI processing, equipment acquisition, and data collection. Officer training was accomplished in the twelve different areas, e.g., administrative revocation procedures, eye gaze nystagmus, sobriety checkpoint operations, DUI detection techniques, and DUI instructor certification. DUI arrest rates were increased to 1 1/2% of the licensed driver population, 12 months ahead of the scheduled date. Eighty-three sobriety checkpoints were held in 1983. The average BAC of arrested offenders was lowered from 0.23 to 0.16, a reduction of 30%. State police processing time was decreased to one hour. Arrest data from local departments is now being collected. Additional PBT equipment was obtained for State and local police units.

Public Information and Education

Public awareness of Delaware's DUI efforts has increased. Survey results (August 1983; University of Delaware) showed that 68% of respondents felt DUI was a "very serious" problem in Delaware. A significant proportion, 67%, "strongly approved" of sobriety checkpoints.

Community Focus

The Delaware Project focused on the entire State. The project has been very well supported from the Governor's office. The Governor's Office of Highway Safety has been instrumental in establishing a high degree of coordination with State agencies involved in the program. The Lieutenant Governor is head of the Governor's Task Force on Drunk Driving.

Systems Approach

The Delaware TOP has been extremely successful, due to the high level of coordination between the Office of Highway Safety and State agencies. Many of the goals established in the operational plan were met in 1983, the first year of TOP operations, often prior to the target date. In addition, Delaware qualified as a State to receive funding under Section 408, the Alcohol Traffic Safety Incentive Grant Program in January, 1984.

Organizationally, the Delaware TOP is coordinated and managed by the Delaware Office of Highway Safety. Since the Target is Statewide, an effective/comprehensive program has been established with State agencies. Organized citizen support and leadership provided by the Governor's Task Force on Drunk Driving have also stimulated and encouraged program activities.

Delaware's TOP program has a solid foundation for accomplishment. A comprehensive and effective planning process yielded the establishment of goals for each program area. The plan identified goals in the areas of general program, enforcement, public information/education, prosecution/adjudication, citizen support, management/coordination, driver licensing and legislation. In addition, long range goals and actions were established, to provide for further refinement of the solution to Delaware's DUI problem.

Self-Sufficiency

DUI fines/fees were increased with the October 1982 legislation. The increased fees were expected to be a deterrent and to assist in financing enforcement activities. Except for a \$75 fee to attend treatment, all fines revert to the State's General Fund. Increased activities have impacted the ability of State agencies to handle the increased workload. Additional funding could be used to hire personnel, etc. This issue will be addressed in a long-range goal to allocate an increased portion of DUI fines to the alcohol program.

Citizen Support

Goals set to generate and increase citizen support were met and exceeded. Twenty-five (25) Students Against Drunk Drivers (SADD)

chapters have been organized. Nineteen (19) Parents Organized for Support and Training (POST) groups have been established. The POST groups work with the public schools to develop alcohol and drug abuse programs. Remove Intoxicated Drivers (RID), a citizen reporting program, was established in May, 1983. Citizen reporting of suspected DUI violators have been effective: of the 90 contacts made as a result of citizen calls, 46 or 51% resulted in an DUI arrest.

Prevention

Goals were set for prevention in two areas. A recommended DUI curriculum will be implemented Statewide by December 1985. Driver education instructors were targeted to receive a refresher course in alcohol issues by April 1985. This goal was met and these instructors will receive refresher training annually. In addition, a long-range goal to establish a DUI correspondence school for juveniles is being considered.

Evaluation

Impact analysis of accident data shows significant reductions coincident with the legislative changes, and subsequently, TOP operations. Total fatal and alcohol related fatal accidents for the period January, 1980 to October, 1983 were analyzed using time series (Intervention) techniques. Beginning in October, 1982, an average monthly reduction of 3 fatal accidents/month was found, a 27% reduction compared to the base average. This represents an annual reduction of 36 fatal accidents or 29%. Alcohol related fatal accidents decreased an average of 2/month, a 30% decrease. Annually, this translates to a reduction of 24 alcohol related fatal accidents, a decrease of 30% compared to the base years. (All results are statistically significant at $p \leq .10$ level.)

A comparison was also made of accidents for January-October, 1982 vs. January-October, 1983. Significant reductions were found and are shown in Table 1.

TABLE 1

DELAWARE ACCIDENT COMPARISON

<u>Accident Measure</u>	<u>Jan-Oct 1982</u>	<u>Jan-Oct 1983</u>	<u>Change</u>	
			<u>No.</u>	<u>%</u>
Fatal	84	64	-20	-24%
Alcohol related Fatal	55	39	-16	-8%
Injury	2350	2161	-189	-8%
Alcohol related Injury	661	487	-174	-26%

In addition, the proportion of alcohol involvement in accidents decreased. Alcohol related fatal accidents decreased from 64% of total fatal accidents to 61%. Alcohol related injury accidents decreased from 28% of total injury accidents to 23%. Therefore, the number and proportion of alcohol related accidents decreased during the first ten months of TOP program activities.

Data for the first full year of the legislation, February, 1983 to February, 1984 shows that the Administrative Per Se process resulted in 93% of DUI offenders receiving license revocations for a minimum of 90 days. DUI convictions increased to approximately 92%. Plea bargains were reduced by 50%.

The number of offenders completing assigned treatment increased. "Treatment" consists of screening and assignment to the Delaware Safety Council Education Program (SCEP) or the Bureau of Alcohol and Drug Abuse Problem Drinking Driver Program (PDDP). The SCEP completion rate increased to 90% in 1983 from 82% in 1977 - 1980. The PDDP completion rate increased to 63% in 1983 from 59% in 1981 - 1982.

General Observations

The Delaware TOP program has accomplished a great deal in its first year of operations. Goals not achieved in 1983 are targeted for completion in the second year of operations. The establishment of long-range goals and actions should ensure program continuity and further accomplishment.

LYNN, MASSACHUSETTS

Lynn was selected as a Target of Opportunity since it offered promise for effective technical assistance based upon the results of a program assessment. The Massachusetts' Governor's Task Force on Alcohol Abuse and Highway Safety had produced a set of recommendations which reflected the acceptance of the need for a comprehensive drunk driver control system. Since the inception of the project in December 1983, every effort had been made to develop and maintain project focus at the community level.

The approach had been a traditional one, the "top down" approach, i.e., obtain commitments from the top people in the city, governmental and community structures. In order to effect this result, a systems description was prepared. The description was then used to assess the needs within the target community, relative to the development of a comprehensive community based drinking driver control program. Prior to any enforcement activity, a baseline attitude survey was conducted by telephone.

General Deterrence

Enforcement

The initial enforcement effort consisted of the establishment of three two man patrol teams. Law enforcement training assistance has included Visual Detection Guide and Eye Gaze Nystagmus. The Lynn Police Department and the Metropolitan District Commission Police conducted a joint sobriety checkpoint operation in August 1984.

Public Information and Education

A Public Information and Education workshop was held for the target principals.

Community Focus/Systems Approach

The Mayor of Lynn appointed a Task Force and a formal kick-off was held on November 27, 1984.

Self-Sufficiency

The concept of self-sufficiency was addressed by the Task Force through existing and proposed legislation.

Citizen Support

Lynn did not have a local chapter of any citizen support group. However, twelve Lynn citizens were members of the Greater Boston MADD. All twelve had been contacted for involvement in target activities. Greater Boston MADD agreed to provide whatever assistance is appropriate when called upon.

Prevention

A meeting was held in August 1984 to discuss the implementation of some form of alcohol education in the schools. A group was organized to follow through on the planning and implementation phases.

An additional activity implemented was the Dram Shop Training Conference on May 23, 1984. The Dram Shop Training was conducted on a county wide basis which included the Lynn Liquor License Holders. Over 300 license holders spent an entire day at the Essex County Liquor License Holders forum. The program was so well received and turned out to be such a great success that it will be replicated in each county in the Commonwealth under the auspices of the Executive Office of Public Safety at the Governor's direction.

Evaluation

The Lynn evaluation concentrated on measures of attitude change throughout the TOP project. Three telephone surveys of community residents were performed: a baseline in 1984, a mid project follow up in 1985, and a final survey in 1986. Using Chi squares and t-tests, statistically significant differences were found between the baseline and subsequent surveys.

The baseline attitudinal survey, sampling 501 people, was completed during the first week in January 1984. Survey results indicated a strong need for a comprehensive community alcohol program. For example, 19% of the respondents reported that within the past year they drove after drinking too much. The perception of risk of being apprehended by the police was less than one in twenty. In the 1985 follow up, a sample of 421 people was asked essentially the same questions as in the baseline survey. The final survey, in 1986, asked the questions of 503 Lynn residents.

A comparison of the baseline with the follow up surveys revealed a number of statistically significant differences. For example, the reported frequency within the past year of driving after drinking too much decreased from 19% at baseline to 13% in the final survey (p .002). Furthermore, reasons given for decreasing the likelihood of driving after drinking included "stricter DWI penalties" (p .003) as well as "changes in personal circumstances" (p .002). Finally, of "ways to avoid drinking and driving" two responses showed statistically significant differences from baseline: "Stay overnight" (p .001) and "Limit alcohol consumption" (p .004).

General Observations

Although this Target had a difficult start up period, the strength of its evaluation effort enabled an assessment of the program activities. The initial phases of the TOP appeared to be hindered by a rash of negative publicity against the city and department heads. Although unrelated to the alcohol program, the effect of this unprecedented outpouring was to de-emphasize the project's priority and impede the progress of the Target effort. However, the creation of a Task Force was a critical program element which refocussed and renewed the Target's momentum.

APPENDIX B

COURT CASES CONCERNING DELAWARE'S DUI LAW

Source: Atlantic Reporter, Second Series, 457, 1983, 357-362.
St. Paul, Minnesota: West Publishing Company.

PERRY v. DECKER

Chs no. 457 A.2d 357 (Del.Supr. 1983)

Del. 357

our jurisdiction should be clearly indicated by statute or constitutional amendment, which is not the case here. See *Steigler v. Superior Court*, Del.Supr., 252 A.2d 300 (1969). Cooley's cross-appeal must therefore be dismissed.

APPEAL AFFIRMED; CROSS-APPEAL DISMISSED.



Bradford PERRY, Sr., Plaintiff,

v.

Henry James DECKER, Secretary of Public Safety of the State of Delaware, and Robert J. Voshell, Director of the Division of Motor Vehicles of the State of Delaware, Defendants.

STATE of Delaware,

v.

Robert E. BARBEN, Defendant.

Supreme Court of Delaware.

Submitted Jan. 19, 1983.

Decided Feb. 3, 1983.

Accused charged with operating a motor vehicle under the influence of alcohol filed an action for injunctive relief. A case of an accused charged with the same offense came to the Superior Court. The Court of Chancery and the Superior Court certified questions of law. The Supreme Court, Herrmann C.J., held that: (1) the Governor could exercise an item veto only on a bill containing more than one appropriation and embracing distinct items, and (2) an invalid partial veto of the drunk driving bill nullified a partial approval of the bill and resulted in a failure of enactment.

Questions answered in affirmative.

from the Superior Court in cases of prosecution under Section 8 of Article V of this

1. Statutes — 33

Governor was not empowered to disapprove by line-item veto single item appropriation, but his item-veto power applied only to bills containing more than one appropriation and embracing distinct items. Del.C. Ann. Const. Art. 3, § 18.

2. Statutes — 33

Governor's invalid partial veto of drunk driving bill nullified partial approval of bill and resulted in failure of enactment. Del. C. Ann. Const. Art. 3, § 18; 21 Del.C. §§ 2701 et seq., 4101 et seq.

3. Statutes — 33

Governor must approve or disapprove bill as a whole and has no constitutional power to alter content of proposed law submitted to him, except as to appropriations of money. Del.C. Ann. Const. Art. 3, § 18.

Upon certification of questions of law by the Court of Chancery and the Superior Court.

James T. Vaughn, Jr. (argued), Vaughn & Vaughn, Dover, Harold Schmittering and Charles E. Whitehurst, Jr., Schmittering & Rodriguez, P.A., Dover, for plaintiff Perry.

Arlen Mekler (argued), Wilmington, for defendant Barben.

Roger A. Brown (argued) and James J. Hanley, Deputy Attys. Gen., Wilmington, for State.

Before HERRMANN, C.J., McNEILLY and HORSEY, JJ.

HERRMANN, Chief Justice:

Two related Certifications of questions of law are involved here: (1) A Certification by the Court of Chancery in *Perry v. Decker, et al.* (hereinafter "Perry"); and (2) a

Constitution shall be governed by the provisions of that Section.

Certification by the Superior Court in *State v. Barben* (hereinafter "Barben"). Both were accepted by this Court on the grounds that the questions of law are of first instance in this State and that there are urgent reasons to have them settled by this Court as soon as practicable.

The basic issue in both Certifications is the legal status of House Bill No. 780 (amending 21 Del.C. Chs. 27 and 41), passed by the General Assembly on July 1, 1982, instituting new procedures and penalties governing the offense of operating a motor vehicle under the influence of alcohol or other drugs.

I.

The Perry Case

This is an action to enjoin the State Secretary of Public Safety and the State Director of the Division of Motor Vehicles from conducting a driver's license revocation hearing under H.B. 780.

The following pertinent facts are undisputed:

On July 1, 1982, the General Assembly passed H.B. 780. The Bill contained an appropriation of \$135,000 "for the purpose of implementing the provisions of this Act." The Bill was presented to the Governor on July 9, 1982. On July 21, 1982, the Governor acted upon the Bill by approving and signing it, but purported to reduce the appropriation to \$20,000 "by line item veto" and return of the Bill to the House of Representatives with the following message:

"I have today approved this Act. Pursuant to the authority conferred in Article III, Section 18 of the Delaware Constitution, however, I have reduced the appropriation in Section 21 of the bill by line item veto.

"Section 21 appropriates \$135,000 to the Division of Motor Vehicles for the purpose of implementing the Act. Because this appropriation is separate from, and independent of, the 1983 Fiscal Year Budget Act, it will result in expenditures

above the 98% limit in violation of Article VIII of the Delaware Constitution. Thus, absent the required declaration of emergency and three-fifths vote, the appropriation is unconstitutional.

"I am advised that the Budget Act and the Grants-In-Aid Act for 1983 appropriate all except \$20,000 of the 98% of general fund revenues officially estimated for Fiscal Year 1983. Therefore, in order to keep the appropriation authorized in this Act within constitutional limits, and to enable the Division of Motor Vehicles to undertake at least preliminary steps toward implementation, I have reduced the appropriation to \$20,000.

"I urge the next General Assembly to act early in its First Session to authorize a constitutionally permissible appropriation and I stand ready to assist in that effort.

"Because the General Assembly may, if it should so elect, exercise its authority to override the Executive Veto, I return House Bill No. 780 as amended by House Amendment No. 2 as approved except as partially disapproved by distinct line item. Nevertheless, in accordance with Article III, Section 18 of the Delaware Constitution, all of the bill which stands approved, in whole or in part, is now law."

The Bill now rests in the House of Representatives as returned by the Governor, without any further action thereon.

The Act provided that it became effective 90 days after enactment. In accordance therewith, the Department of Public Safety began enforcing the Act on October 20, 1982.

On October 27, 1982, Perry was arrested and charged with operating a motor vehicle under the influence of alcohol in violation of 21 Del.C. § 4177 as amended by H.B. 780. Under the provisions of the Act, the Department commenced the newly prescribed administrative proceedings to determine whether Perry's license should be revoked. After the commencement of the administrative procedures, Perry filed the action for

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injunctive relief which led to this Certification by the Court of Chancery.

The Barben Case

The following undisputed facts are all that need be added to the foregoing statement of facts:

On October 26, 1982, Barben was arrested and charged with operating a motor vehicle under the influence of alcohol, in violation of § 4177 as amended by H.B. 780. By transfer from the Justice of the Peace Court to the Court of Common Pleas, and upon Barben's refusal to waive the right of jury trial, the case came to the Superior Court. Shortly before the day for arraignment, the Superior Court submitted its pending Certification.

II.

The Certification from the Court of Chancery presents the following Question of Law:

"Whether, assuming *arguendo* that the Governor has no power to reduce the amount of an appropriation under Article III, Section 18, the modifications to Chapters 27 and 41 of Title 21 of the Delaware Code contained in House Bill 780 are valid laws of the State of Delaware which must be enforced by the Department of Public Safety of the State of Delaware."

The Certification from the Superior Court presented the foregoing Question and the following additional Question:

* Del. Const., Art. III, § 18 provides in pertinent part:

"Section 18. Every bill which shall have passed both Houses of the General Assembly shall, before it becomes law, be presented to the Governor; if he approves, he shall sign it; but if he shall not approve, he shall return it with his objections to the House in which it shall have originated, which House shall enter the objections at large on the journal and proceed to reconsider it. If, after such reconsideration, three-fifths of all the members elected to that House shall agree to pass the bill, it shall be sent together with the objections to the other House, by which it shall likewise be reconsidered, and if approved by three-fifths of all the members elected to that House, it shall become a law; * * *. If any bill shall not be returned by the Governor within ten days, Sun-

"If the amendments to Chapters 27 and 41 of Title 21 of the Delaware Code contained in House Bill 780 are invalid, are the provisions of Title 21, Chapters 27 and 41 existing prior to October 19, 1982, still in effect?"

III.

Perry and Barben contend that H.B. 780 did not become law for these reasons: that under *Del. Const.* Art. III, § 18,* the Governor lacked the authority to disapprove the appropriation provision of H.B. 780; that the line-item veto provisions of Art. III, § 18 apply only to appropriation bills as such and that, otherwise, the Governor may not approve a bill in part and disapprove it in part; that, therefore, the action of the Governor, in effect, amounted to a veto of the entire Bill and, therefore, no part of H.B. 780 became law.

The State contends that the Governor's action in purporting to reduce an item of appropriation was a nullity and, therefore, H.B. 780 is law because it was not vetoed in accordance with Art. III, § 18. Alternatively, the State argues that the attempted reduction of the appropriation item was, in effect, a permissible line-item veto under Art. III, § 18 and, therefore, the entire Bill was not vetoed.

IV.

In the Questions presented by both Certifications, it is assumed, *arguendo*, that the

days excepted, after it shall have been presented to him, the same shall be a law in like manner as if he had signed it, * * *.

* * * * The Governor shall have power to disapprove of any item or items of any bill making appropriations of money, embracing distinct items, and the part or parts of the bill approved shall be the law, and the item or items of appropriation disapproved shall be void, unless repassed according to the rules and limitations prescribed for the passage of other bills, over the Executive veto. * * *. Other provisions of Art. III, § 18, dealing with the status of a bill after final adjournment of the General Assembly, are not pertinent here. It is undisputed that, because "recessed to the call of the Chair," both Houses were not in final adjournment.

Governor lacked the power to reduce the amount of an appropriation under Art. III, § 18. Accordingly, we do not consider that issue.

V.

[1] The threshold issue of the Questions, as certified, is whether the Governor correctly exercised the line-item veto power, vested in him by Art. III, § 18, upon the appropriation provision of H.B. 780. We think not.

The controlling sentence of Art. III, § 18 is thus:

"The Governor shall have power to disapprove of any item or items of any bill making appropriations of money, embracing distinct items, and the part or parts of the bill approved shall be the law, and the item or items of appropriation disapproved shall be void, unless repassed according to the rules and limitations prescribed for the passage of other bills, over the Executive veto." (Emphasis supplied)

Upon the bases of its text, its historical background, and the great weight of authority, we hold that the above provision of Art. III, § 18 applies only to a bill containing more than one appropriation and "embracing distinct items."

First as to its text: due significance must be accorded to the plain and unambiguous plural terms appearing in the reference to "any bill making appropriations of money, embracing distinct items." The single appropriation provision of H.B. 780 does not fall within that category of bills. Only bills containing more than one "distinct" item of appropriation of money meet the language of § 18 providing for the Governor's authority to disapprove one part of a bill while approving another part.

Second, it is clear that the drafters of the line-item veto provision of Art. III, § 18 contemplated its application only to "appropriation bills." A delegate to the 1897 Con-

stitutional Convention remarked that Art. III, § 18 seemingly was taken from the Federal Constitution. Judge Spruance responded thereto as follows:

"Yes; except in that particle in which the Constitution of the United States was found to be defective—two particles—that the President's veto may be overridden by two-thirds of this vote. But there was another particle in which it does vary and as to which he has made no criticism, and that was this—two particles more, perhaps, in regard to his power of vetoing appropriation bills, in separating them, whether they were distinct items of appropriation, and he could veto part and approve part. As to that, I do not suppose anybody who is at all familiar with the legislation either of the Federal Government, or of the States, would object to now at this day, because we know so well how different subjects of appropriation are mingled together, some of which are wise, and some of which are dreadfully unwise, and when the President has always been hampered by an inability to do anything except to accept the whole or reject the whole.

"Provisions in regard to his power to veto separate items over appropriations bills, have been adopted into all the new Constitutions, and the absence of it in the Federal Constitution is a fact greatly to be lamented." (Emphasis supplied)

Debates and Proceedings of the Constitutional Convention of the State of Delaware 1896-1897, Vol. 1 p. 232.

Finally, the great weight of authority supports the conclusion that the application of a constitutional line-item veto provision such as ours must be limited to bills which contain "distinct items" of appropriation and may not be applied to bills which contain only a single item of appropriation: *State v. Okla. Bd. of Corrections*, Okla. Supr., 614 P.2d 551 (1980); *State v. Olson*, N.D.Supr., 286 N.W.2d 262 (1979); *Cenarrusa v. Andrus*, Idaho Supr., 582 P.2d 1082

** The language "distinct items" and "distinct terms" appear to be words of art in common

usage in state constitutional provisions authorizing line-item veto of appropriations.

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(1978); *Regents of State University v. Trapp*, Okla.Sup., 28 Okl. 83, 113 P. 910 (1911); *State v. Holder*, Miss.Sup., 76 Miss. 158, 23 So. 643 (1898).

We conclude that the Governor was not empowered, under Del. Const. Art. III, § 18, to disapprove by line-item veto the single item appropriation in H.B. 780; that, therefore, the Governor's action did not accomplish his purpose of approving and enacting the Bill into law in part, and disapproving and not enacting it into law in part.

VI.

[2] This then leads to the ultimate question for decision: Did all of H.B. 780 become law, in the form passed by the General Assembly, or did none of it become law? By virtue of Del. Const. Art. III, § 18, of prior Opinions of the Justices of this Court, and of other eminent authorities, we are compelled to hold that H.B. 780 *in toto* has failed of enactment into law.

The enactment of a law in this State must be in strict accordance with the provisions of the State Constitution, Art. III, § 18. The present status of H.B. 780 fits nowhere in the constitutional format for the valid enactment of a statute: It has not been approved by the Governor in its entirety by signature; it does not meet the constitutional exception for line-item or partial veto; it has been returned to the House of Representatives within 10 days of its receipt under cover of a veto message, thus preventing it from becoming law without the Governor's approval; it now rests in the House and has not been reconsidered and repassed in both Houses. Thus, there is no provision of Art. III, § 18 under which it may be held that H.B. 780 now stands validly enacted into law.

The State takes the position that since the Governor's action in seeking to reduce the appropriation was a "nullity," H.B. 780 has not been vetoed in any respect and, therefore, is law. The position is untenable and in conflict with prior Opinions of the Justices of this Court holding that, under

Art. III, § 18 of our Constitution, an invalid partial veto of a bill nullifies a partial approval of the bill and results in its failure of enactment. We adhere to that rule.

In *Opinion of the Justices*, Del.Sup. 210 A.2d 852 (1965), a Bill containing 14 sections was presented to the Governor. He attempted to approve the first 13 sections over his signature and to line-item veto Section 14. It was held that the partial veto power did not apply because an appropriation bill was not involved; that the Governor's disapproval of Section 14 nullified his attempt to approve the other Sections; and that no part of the Bill became law. That *Opinion of the Justices* was based upon the following rationale:

"Since the attempted veto of Section 14 was of no force and effect the bill as an entirety either must be deemed approved by the Governor, in which event it is the law, or as an entirety it must be deemed to have failed of approval by the Governor, in which event it is not the law.

"We are of the opinion that since the bill as an entirety has failed to receive the approval of the Governor, it failed of enactment. Article 3, Section 18 of the Constitution, with the exception of bills appropriating money, requires the Governor to approve or not approve an entire bill submitted to him. . . ."

"Thus it is, we think, that an attempted partial veto of a non-appropriation bill by the Governor makes nugatory his attempted approval of the balance of the bill. To conclude otherwise would permit the Governor to cause a law to be enacted in which the Senate and House have not concurred. At the same time, to conclude that since the veto of the portion is a nullity the Governor's approval of the balance must be held to include the portion rejected by the abortive veto would be to ascribe to the Governor an approval he has demonstrated he did not have."

210 A.2d at 854-55. (Emphasis supplied)

[3] The rationale underlying the entire governmental concept here involved, which

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we find persuasive and hereby adopt, was well stated by the Justices of this Court in the foregoing Opinion as follows:

"Furthermore, fundamental constitutional consideration requires that this be so. The legislative process for the enactment of law established by our Constitution contemplates the formulating of proposed laws by the Houses of the General Assembly, and the submission of a proposed law to the Governor for his approval or disapproval. In effect, the Governor and the Houses of the General Assembly are a legislative team, but each has separate and distinct functions in the enactment of laws. It is the function of the Senate and House to agree upon the form and substance of a law, and, generally speaking, it is the function of the Governor to act as a check upon the final enactment of that law. In doing so, he must approve or disapprove it as a whole for he has no constitutional power to alter the content of a proposed law submitted to him, except as to appropriations of money."

210 A.2d at 855.

The principles endorsed in the foregoing *Opinion of the Justices* were adhered to in the more recent *Opinion of the Justices*, Del.Sup., 306 A.2d 720 (1973). There, the Attorney General had previously ruled (just as the State here contends) that an invalid line-item veto left the entire Bill valid and operative as though the veto had not occurred. The Justices expressly disagreed, endorsing the rationale of the 1965 Opinion, above quoted, and stating:

"The fundamental constitutional requirement of agreement on an entire piece of legislation between the House and Senate and the Governor is necessary whether the proposed legislation is an appropriation bill or a matter of general law, subject only to the authority conferred by Article III, Section 18 of the Constitution permitting a partial veto by the Governor of an item of appropriation."

"Consequently, it follows that, even though proposed legislation be an appropriations bill in some respects, if the Governor attempts to veto a portion of the bill, itself, which is not an appropriation but is a matter of general law, that indicates a lack of agreement between the Governor and both Houses of the General Assembly and, therefore, there has been no approval of the proposed legislation as an entirety by the Governor. Accordingly, that absence of approval necessitates the conclusion that the law has not been validly enacted." (Emphasis supplied)

306 A.2d at 723-24; accord, *Okla. Bd. of Corrections*, 614 P.2d at 556; *Regents of State University v. Trapp*, 113 P. at 914.

For the foregoing reasons, we must conclude that H.B. 780 in its entirety failed of enactment. The result is regrettable but necessary, we think, by a proper construction of our Constitution.

Accordingly, the Question presented by the Certification of the Court of Chancery is answered in the Negative.

VII.

In view of the Negative Reply to the first Question, the additional Question presented by the Certification from the Superior Court is answered in the Affirmative.



Nathaniel J. PLASS, Defendant
Below, Appellant,

v.

STATE of Delaware, Plaintiff
Below, Appellee.

Supreme Court of Delaware.

Submitted on Reargument Sept. 9, 1982.

Decided Feb. 4, 1983.

Defendant was convicted before the Superior Court of murder in the first de-

